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DEDICATION

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ABSTRACT

THE ATTITUDE OF LIBYAN HIGH SCHOOL TEACHERS TOWARDS THE ISSUE OF ENVIRONMENTAL EDUCATION AND SUSTAINABILITY

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This thesis investigated and explored the level of environmental and sustainability education in the secondary school in Libya. The participants consisted of secondary school teachers in twenty secondary schools in Libya. The basic question that was needed to be answered is "what are student's perceptions of Environmental Education and the current curriculum in secondary schools of Libya". A quantitative analysis was used in this study which employed the approach of using a questionnaire survey, the survey questions were selected and modified according to studies carried out by researchers in previous studies. The level of sustainability of an environment goes a long way in preserving the environment for future generations, as such this research provided an overview on the state of environmental training approaches and methodologies to meet the sustainability demands at regional, national and local levels in Libya, where with it was discovered that the level of environmental and sustainability education in the secondary schools is not adequate enough as required. In this study twenty high school were investigate and 500 teachers of different subjects in these high school were the main target. The survey questionnaires that were completed by these high school teachers were targeted to bring the understanding of the level at which sustainability is practiced in the various schools, it was also targeted at bringing the understanding of how much knowledge of sustainability the high school teachers had. At the end of the research it was discovered that more is still needed to be done for the issue of sustainability to be taken seriously in the high school level in Libya and this goes further to reflect on the practice of the general country, as sustainability and environmental education is still a baby in Libya.

Key Words: sustainability, environment, Libya, education, training**.**

ÖZET

LİBYAN LİSE ÖĞRETMENLERİNİN ÇEVRE EĞİTİMİ VE SÜRDÜRÜLEBİLİRLİĞİ KONUSUNDA YÖNELİK TUTUM

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Bu çalışma, Libya Orta Eğitim kurumlarında çevre ve sürdürülebilirlilikle ilgili eğitim seviyesini araştırmak ve incelemektir. Çalışmaya, Libya'daki 21 orta okulda görev yapan öğretmenler katılmıştır. Katılımcılara, "Libya'daki orta okul öğrencilerinin çevre eğitimi algıları ve mevcut müfredat nedir?" sorusu sorulmuştur. Bu çalışmada, anket araştırmasının kullanıldığı nitel bir analiz yapılmıştır. Anket soruları, daha önce araştırmacıların yaptıkları çalışmalardan alınmış ve modifiye edilmştir. Çevrenin sürdürülebilir olması ve gelecek nesiller için korunması uzun bir zaman gerektirir. Bu çalışmada, Libya'da, çevreyle ilgili bölgesel, ulusal ve yerel seviyelerde sürdürülebilirlilik taleplerinin karşılanması konusunda verilen çevre eğitimi ve yöntemleri ele alınmıştır. Libya'da orta eğitim kurumlarındaki çevre ve sürdürülebilirlilik eğitiminin istenilen düzeyde olmadığı ortaya çıkmıştır.

Bu çalışmaya 20 yüksek okul ve 500 öğretmen katılmıştır. Öğretmenlerin cevapladığı anketlerde, çeşitli okullarda sürdürülebilirlilik seviyesi anlayışının nasıl algılandığı ve uygulandığı hedef alınmıştır. Bunun yanında, öğretmenlerin de bu konuda algılamaları da hedef alınmıştır.

Çalışma sonucunda, Libya'daki yüksek okullarda, sürdürülebilirlilik konusunda yapılacak çok şeyin olduğu ve konunun ciddiye alınması gerektiği, bunun da zaman içinde ülke çapına yansıyacağı ortaya çıkmıştır.

Anahtar Kelimeler: Sürdürülebilirlilik, çevre, Libya, eğitim, staj

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EE: Environmental education

EL: Environmental literacy

NGO: Non-governmental organization

EPA: Environmental protection agency

EEI: Education and environmental initiative

WHO: world health organization

ERBS: Environmental responsibility behaviour

ADHD: Attention deficit hyperactivity disorder

UNESCO United Nations Educational, Scientific and Cultural Organization

UN: United Nations

IUCN: International Union for the Conservation of Nature and Natural Resources.

NAAEE: North American Association for Environmental Education

EP&C: Environment Principals and Concepts

UNCED: Conference on Environment and Development,

HFA: Health for All

ERBs: Environmentally responsible behaviours.

CHAPTER I

1. Introduction

Recently the persons and organizations that have been involved in advocating sustainable development, have been able to organize and recognized the need for humans to have a change in value, attitudes and behaviours so as to achieve a sustainability transition of the environment that will meet human needs and reduce disease, hunger and poverty. Libya is a country located in the northern part of Africa and it is a developing country, as such the issue of sustainability must be investigated in order to advice or possibly correct the problems that could arise from “protecting the environment via sustainability”. The behaviours of individuals towards environmental protection and sustainability cannot be overemphasized, and it is a function of the amount of environmental education that has been passed on to them. They regularly conjure solid emotions and are commonly communicated regarding great or awful, better or more regrettable, and allure or shirking. The state of mind of a man characterize or guide the individual to objectives, and give benchmarks against which the conduct of individuals and social orders can be judged. Fundamentally, conduct alludes to solid choices and moves made by individuals and gatherings, which are regularly established in hidden esteems and dispositions.

From the earliest starting point of humanity till today, endeavors to adventure nature and the qualities identified with it proceeds in an expanding way. Researchers, for example, Galileo and Newton characterized science as the best approach to apply science, which implies science is the best approach to endeavor nature for the advantage of humankind. This thus delineates science given to man enabled him to misuse the nature. The way that people utilize air, water, soil and other life frames which has a place with nature, for their own advantage brought about the issue of nature. Pollution or misshaping of the earth was not understood at first because of nature's capacity to regenerate itself. Generally the expansion in population, industrialization and urbanization in the twentieth century enabled nature issues to raise at sufficiently high levels both subjectively and quantitatively, that humanity

would not have the capacity to overcome easily. At the point when 4000 individuals kicked the bucket in London on December 1952, individuals' consideration was attracted to the issues of nature. In 1969, UN General Secretary UT hant prompted associate countries to stop old fights keeping in mind the end goal to secure nature, decrease population development and help create poor countries (Keleş and Hamamci, 1998). At the Conference of Stockholm in 1972 members went to an assertion about changing the way humankind treats nature and the need to help ineffectively created countries as far as technology, information and economy (Görmez, 1997). These happenings have been able to give a clear view of the importance of education in changing human behavior in order to provide solution to the problems of nature (Aslan, 2008).

Education characterizes the nature of a man's states of mind, musings, comprehension and practices (Karsli, 2004). Be that as it may, characteristics of a man are not free, rather they are intuitive. This is the reason, changes in the nature of a man's practices, contemplations and comprehension is specifically associated with his mentalities. Or, on the other hand basically, a man's change of conduct is specifically identified with his state of mind.

Obviously the coveted result of “environmental education (EE) is to make an open that is environmentally proficient. Numerous EE projects and materials have this as an expressed reason”. In any case, measuring environmental literacy (EL) has stayed subtle. Some national studies have been led to endeavor to gauge it. A couple states have endeavored to occasionally review their citizenry to assemble EL information. While these are critical endeavors, there is a solid trust that a significant number of the inquiries asked still need in precisely measuring environmental literacy? Further, I trust that these vital instruments neglect to represent social and educational framework contrasts and they don't generally think about acknowledged benchmarks for EE. This project produced a survey instrument that geared towards the accurate measurement of three components of environmental literacy Awareness, knowledge, and attitudes toward environmental issues. This involved the arrangement of careful questions, the term environmental education and its first appearance in the academic papers develops great discussion interest, this is

because its credit can be attributed to different people and different authors. However there maybe a disagreement about who used or provided a definition of the term for the first time (Dinsinger, 1983). Through personal communication with John Kirk, Dinsinger (1983) was able to mention an early use of the term by Thomas Pritchard, during a presentation at Paris held in 1948 this meeting was at the International Union for the Conservation of Nature and Natural Resources (IUCN)..”

The sustainability endeavors in the Middle East concentrate on using economic outgrowth as a beginning stage to assemble the vital establishments for sustainable advancement. The manufactured condition in the Middle East has immediately extended as a result of the fast increment in population and human advancement. These progressions have likewise prompted the ascent of consumerism, which thus brought about environmental degradation and a conceivable environmental change emergency later on. The sustainable improvement rehearses in the Middle East are confronting many difficulties that impede specialists from taking after the worldwide sustainable advancement system (Elgendy, 2012). The Middle East has numerous exceptional attributes that set the locale apart from whatever is left of the world. As per El Fadel (2004), the essential territories of environmental enthusiasm for the Middle East incorporated its hot and dry climate, absence of water, absence of normal assets, for example, wood and other building materials, expanded vitality utilization, and expanded waste era. The practice of sustainable development region neither follow an established modernized development framework nor refer to local examples of sustainable development practices (El Fadel, 2004). The quick urban development in the range mirrors the significance of oil as a vitality asset. Numerous urban areas and neighborhoods in the Middle East request incredible measures of oil to protect and widen their foundations (Elgendy, 2012). In addition, the greater part of these areas are loaded with structures that are not reasonable for dry atmosphere and require vitality, serious molding and electric lighting.

The UN has proclaimed 2005 to 2014 the Time of Education for Sustainable Advancement; the general objective being to use education as a methods for coordinating the standards of sustainable improvement with

human esteems and viewpoints keeping in mind the end goal to make a sustainable society (UNESCO, 2005). Notwithstanding, education is regularly seen as an unalloyed decent and, thus there have been couple of observational reviews on the expenses and advantages of various types of education inside the field of environmental protection. Subsequently, there is an earnest requirement for a complete, quantitative and basic evaluation of the part of education so as to decide how educational arrangements might be done in the most financially savvy way to help the execution of environmental protection systems.

1.1 Scope of research

This research will focus on individual and attitudes, and behaviours of individuals both students and teachers in secondary schools in Libya, that will either support or discourage the environmental sustainability transition in Libya.

1.2 Aims and objective

The research intends to investigate the behaviours and attitude of Libyans toward the issue of sustainability in order to find out how much knowledge they have about sustainability and environmental protection and also to find out how well the know that their decision would either affect the environment positively or negatively

1.3 Research question

This research will make use of the quantitative data collection method, questionnaires will be distributed that will be completed by Libyans at high school levels,

A. how has environmental education been included in the curriculum of the school division?

B. how has the implementation of environmental education directed by individual classroom teachers?

C. What are the common practices and strategies that are mostly used to implement environmental education?

D. to what extent are these practices used to implement environmental education formally evaluated?

E. How do schools in Libya utilize teaching tools for environmental education?

1.4 Thesis guidelines

This study was organized into five chapters.

Chapter 1 contains an introduction of the topic, research questions, and scope of research, aims and objectives, the organization of the study.

Chapter 2 contains the critical reviews of previous comments and studies in literature by other researchers on different topics.

Chapter 3 parts of the thesis contains the methodology for the study, it also entails the details of population, data gathering, and data analysis.

Chapter 4 clearly describes the findings and results of the research study, which includes tables and distribution..

Chapter 5 contains discussion, conclusion, and recommendations for further study.

CHAPTER II

2. Literature Review

2.1 History of Environmental Awareness

In order to completely learn or know about environmental awareness we must first look into the procedures and achievements of different countries. The American Protection development was perceived by numerous in the mid 1900's (Barrett 2007). This happens to be recently the start of an extensive rundown, be that as it may, these few pioneers uplifted environmental mindfulness and made such associations as the Audubon Society, the Sierra Club, and the National Parks Benefit. As it is referred to today, environmental conciousness is seen as conceived in the 1960s by a mix of powers.

Before me must talk about the environment it is more ethical to speak about the growing population of the world today, a former president in the United States of America once said that “Our preservation must be not quite recently the great protection of insurance and improvement, however an imaginative protection of reclamation and advancement. Its worry is not with nature alone, but rather with the aggregate connection amongst man and his general surroundings. Its protest is not quite recently man's welfare but rather the respect of man's soul (Taylor 2009).

Apparently the first time Earth Day was celebrated was in 1970 and the total population of participant was approximately twenty million people; the photographs of Ansell Adams helps to instill a strong sense of reverence for nature in the general public. The happenings at Love Canal became popular in 1978 introducing a wide-spread awareness to the problem of toxic contamination, and 1979 brought the episode at the Three Mile Island nuclear reactor. There have been the springing up of Grassroots movements across the country in response to these episodes, some of which have been very helpful in the initialization of change in various educational fields, however no significant developments were seen in the field of engineering and outline. While the 1980s were genuinely calm, with components of sustainable improvement going to the bleeding edge over the globe, the 1990s saw more

than 1,200 land confides in ensuring about five million sections of land. The Unified Countries Conference on Condition and Improvement, or the Earth Summit, was held in 1992 in Rio de Janeiro, bringing about elevated familiarity with various worldwide environmental issues. While these happenings are vital and unquestionably vital in the domain of environmentalism, their effect on the normal occupant outside of this field is easy to refute. Since these points did not saturate each family unit, plan experts – like the general open – rushed to disregard both the profundity and the importance of the environmental issues that were going to the bleeding edge of society.

2.2 Sustainability

The term sustainability is the expression existing apart from everything else. It is utilized all over the place; in business, design, urbanism, legislative issues and so on. As an aftereffect of its acknowledgment, the term has been abused as sometimes this is according to some researcher who acknowledged that “The term sustainability has gotten to be a standout amongst the most abused and very habitually abused terms in the improvement of writing" (Choguill, 2007). Barton too highlighted that sustainability is more "regarded in the break than in recognition." He proceeded by saying "it is frequently utilized with easygoing surrender as though minor reiteration conveys green honesty" (Barton, 2000).

The term was initially utilized as a part of points of confinement to development and has been broadly connected in the field of environmental science, engineering, urban arranging, and so on after the 1987 production of the report of World Commission on Environment and Advancement, which is otherwise called the Brundtland Commission (Wheeler, et al. 2004).

In any case, the worries identified with unsustainable urban improvements have a longer history.

Dangers to these parts of nature imply that there is a hazard that these things won't be kept up. For instance, the extensive scale extraction of non-inexhaustible assets, (for example, minerals, coal and oil) or harm done to the regular habitat can make dangers of genuine decrease in quality or demolition

or annihilation. Generally, when environmental issues emerge environmental directors work out how to decrease the harm or wastage. Be that as it may, it is not generally simple to work out precisely when and where dangers will have their belongings and regularly the effects are difficult to turn around. So progressively environmental chiefs receive systems intended to forestall harm being done in any case. A full sustainability program needs to incorporate activities to keep dangers and effects from emerging, activities to shield the earth from dangers and harm, and rebuilding to invert harm officially done. Sustainability issues emerge wherever there is a danger of troublesome or irreversible loss of the things or characteristics of the condition that individuals esteem. Also, at whatever point there are such dangers there is a level of desperation to make a move. Environmental sustainability projects ought to incorporate activities to lessen the utilization of physical assets, the appropriation of a 'reuse everything/purchase reused' approach, the utilization of inexhaustible instead of depletable assets, the overhaul of generation procedures and items to take out the creation of poisonous materials, and the security and reclamation of common territories and situations esteemed for their decency or excellence.

Some environmental issues are generally of local noteworthiness while others have provincial or even worldwide importance. At the individual or family unit level, there are a large group of moves that individuals can make to add to environmental sustainability at home, when voyaging or getting to administrations or products, at work, or when going about as a group part or native or as a speculator of individual assets. Some helpful cases incorporate living near work where conceivable and strolling, and utilizing a bicycle or utilizing open transport. These are great choices to spare vitality and decrease nursery gasses. On the off chance that these alternatives are unrealistic at that point utilizing a ultra-effective cross breed petroleum/electric vehicle can cut nursery gasses and oil utilization by around half and cut other dangerous poisons by around 90%. Purchasing items made of reused materials will generally spare materials and vitality, cut nursery gasses and poisonous pollution, and decrease impacts on living things in nature. Introducing a water

tank and low stream shower can spare water Brundtland is more than once referenced in talks on sustainability and environmentalism.

2.2.1 The Importance of Sustainable Development

The population in sustainable areas is growing rapidly because of the continuous migration of people who are looking for better employment opportunities. The United Nations estimates that the global urban population will reach 5.1 billion by 2025. The past two centuries have also witnessed a rapid population growth and rapid technological advancements that result from industrialization. These advancements have also increased the awareness of people about sustainability development and the need to preserve the ecological system. From another perspective, cities and neighborhoods cover only 2% of the Earth's surface, but consume 75% of the natural resources (Noorman and Uiterkamp, 1998), thereby driving us to consider sustainable development. GDP is the most common indicator for measuring the success of a country. This indicator measures the economic products and services of a country without considering any of its environmental quality issues. A more thorough measurement must consider all three components of sustainable development, namely, the issues in the environment, economy, and society. (White 2001) described the Industrial Revolution as a disaster that harshly affected mankind and the natural environment by introducing scorbutic fuels and chemically controlled agricultural products, promoting deforestation, and exhausting maritime resources. After the Second World War, industrialization promoted sustainable development and urban growth by introducing improvements in technology, transportation, and housing. These identifications has proven how important the subject of sustainability is to the development of the country.

2.2.2 Sustainable Development in the Middle East

It is very important to look into the sustainability of the Middle East countries like Libya. Libya can be seen as one of them, majority of the energy of sustainability education acquisition is geared towards finding out if the sustainability efforts in the Middle East focus on utilizing economic outgrowth as a starting point to build the necessary foundations for sustainable

development. The built environment in the Middle East has quickly expanded because of the rapid increase in population and civilization. These changes have also led to the rise of consumerism, which in turn resulted in environmental degradation and a possible climate change crisis in the future. The sustainable development practices in the Middle East are facing many challenges that hinder practitioners from following the global sustainable development framework (Elgendy, 2012). The Middle East has many unique characteristics that set the region apart from the rest of the world. Basically we can say that the primary areas of environmental interest in the Middle East included its hot and dry weather, lack of water, lack of natural resources such as wood and other building materials, increased energy consumption, and increased waste generation. (El Fadel 2004), the sustainable development practices in the region neither follow an established urban development framework nor refer to local examples of sustainable development practices (El Fadel, 2004). The rapid urban growth in the area reflects the importance of oil as an energy resource. Many cities and neighborhoods in the Middle East demand great amounts of oil to preserve and broaden their infrastructures (Elgendy, 2012). Moreover, most of these locations are riddled with buildings that are not suitable for dry climate and require energy-intensive conditioning and electric lighting. According to the sustainable development principles, the characteristics of urban growth and building directions in the Middle East must be changed significantly (Al-Qahtany, Rezgui, and Li, 2014).

2.3 Education and the environment

Environmental education (EE) can be defined as an organized attempt as well as effort to impact the knowledge of the methods with which natural environments operates, most especially the behavioral management capacity of humans and the ecosystems to live sustainably. The field of environmental education inculcates other strategic fields like biology, chemistry, and others The term can also often be used to refer to education within the school system. However, with the present happenings in the society today we can also say it includes educating the public and other audiences, using print materials, websites, media campaigns, etc.

In order to see how environmental education has greatly affected the world today the kind of effects and elements it had, we must first evaluate which environmental challenges exists in a particular area. This can be achieved by listening to the inhabitants of the area .The environmental education can also be evaluated in a similar manner by identifying the actors and actions as they are perceived by the inhabitants.

With regards to the nature of EE in previous times, (Gough, 2006) notes that there were concerns that the EE discourse was vague and so in an effort to clarify the EE field, a number of definitions were proposed, after which they had to define the objectives of EE and they included

1. An unmistakable understanding that man is an indistinguishable piece of a framework, comprising of man, culture, and the biophysical condition, and that man can adjust interrelationships of this framework;

2. An expansive comprehension of the biophysical condition, both normal and man-made, and its part in contemporary society;

3. A crucial comprehension of biophysical environmental issues going up against man, how these issues can be comprehended, and duty of natives and government to work towards their answer.

4. Demeanors of worry for the nature of the biophysical condition which will persuade residents to partake in biophysical environmental critical thinking (Stapp et al, 1969)

These objectives place a greater emphasis on addressing problems related to the biophysical environment more than on other human dimensions. The EE programs focus more on environmental awareness and conservation education so as to promote the preservation and conservation of natural resources. The human agent, as the main cause of environmental degradation is largely ignored. During this period, environmental education promoted a reactive approach characterized by technical solutions to environmental problems during the era of modernity (Sauvé, 1999). Furthermore, the objectives reflect conservationist and problem-solving currents in environmental education, as noted by (Sauvé, 2005). Another popular definition of EE was provided by

(IUCN1970) but not all academics involved in the EE discourse accept the definition. (Greenall, 1987) comments: unless environmental education “is defined in a practical way which is accepted by teachers and those who administer education it cannot command a place in the formal curriculum … and can have no continuing academic identity.” (Lucas’s 1972). Contribution to the EE discourse helped to provide greater clarity on the nature of EE.

2.3.1 Approaches to environmental education

Generally we can describe environmental education as an educational system that involves Conceptual issues and curriculum implications, which proposes a framework for classifying environmental education programs in the environment. This definition classifies EE concept by making it less ambiguous. The first two, education about the environment, is goal orientated while the last one is a pedagogical approach. In the case of education in regards to environmental issues, the educational programs are designed to provide information regarding the environment and the goal is to enable the students to obtain knowledge about the environment (Lucas, 1972). These program objectives are cognitive and students may achieve different levels of cognition in learning about the environment (Bloom et al, 1974). Also students may be expected to comprehend and interpret environmental data so as to analyze situations of the environment into the basic principles; so as to obtain explanations that may possibly account for an environmental phenomenon that the students are not so use to, as well as to evaluate environmental data, phenomena, and, perhaps, the consequences of proposed manipulations in terms of the likely environmental responses (Lucas, 1972). Additionally, it was seen by previous researchers that education about the environment also involves the teaching and learning of skills that enable the student to investigate the nature of the environment. (Fien, 1993), argues that education about the earth is worried with learning about common frameworks and forms and the natural, economic and political variables that impact choices about how individuals utilize the earth."

Examples of education in the environment include outdoor education programs and any other educational programs that take place in the environment (Lucas, 1972). Some of these researchers have maintained that

Education throughout the environment uses pupils' experiences in the environment as a medium for education (Fien, 1993). The points of this learner-focused way to deal with environmental education are to include reality, pertinence and useful experience to learning and to furnish understudies with a valuation for the earth through direct contact with it might likewise encourage environmental concern if students wind up plainly spellbound by the significance and delicacy of biological communities … or submerged in the qualities struggle over an environmental issue (Fien, 1993).

Education provided for the environment covers programs that aim at assisting the preservation or improvement of the environment for a particular purpose and it is interesting to know that these programs are designed to teach skills, as well as positive attitudes, values and behavior towards the environment, (Lucas, 1972). As we know, the objective of education for the environment is to deliver a quality environment, all things considered nationals must be furnished with the aptitudes that are important to accomplish this end. Different specialists have bolstered this movement and clarification of education for the environment yet some of them have additionally included that it ought to have a transformative nature in the announcement. Education for the earth has a plain arrangement of characteristics education and social change. It plans to attract understudies in the examination and determination of environmental issues to propel lifestyles that are great with the sustainable and reasonable use of assets. In doing as such it expands on education about and through the earth to help build up an educated worry for the earth, a delicate environmental ethic, and the aptitudes for taking an interest in environmental assurance and change. Previous authors and researchers have argued that education in and about the environment help to maintain the status quo with regards to unsustainable lifestyles whereas education for the environment is more transformative. (Robottom, 1987) state that education for the environment is environmental education whereas education in or about the environment cannot be called environmental education. Some EE author's categories point out that the activities called education for the environment have helped EE practitioners to focus on the political dimension of issues as well and to clarify the socially critical aspect of environmental education.

2.3.2 Environmental Education in the Secondary School Curriculum

The terms of institutionalization of EE in secondary schools, and its tensions have been experienced between maintaining its holistic nature and the school curriculum that is organized into fragmented disciplines. The aims of school education often clash with the goals of environmental education (Lam, 2007). A number of models have been tried in an effort to incorporate EE in the secondary school curriculum while some propositions have been made for the said issue as well for example (UNESCO, 1977) proposed a number of models through which EE could be incorporated into the secondary school curriculum. In the first option, EE could be introduced as a separate subject called Environmental Studies whose status would be equal to that of the other examinable subjects. The subject could be taught by trained teachers. This option ensures that EE is not marginalized as often happens in the infusion model. The main objection of education authorities to this proposal has been that school curricula are already too overcrowded to accommodate more subjects. The other disadvantage is that the goals of teaching other subjects might clash with the EE aims, resulting in the trivialization of the latter. The introduction of Environmental Studies was tried in the UK with limited success because the subject failed to compete with established, overlapping subjects such as geography and biology. The second option is that EE could be implemented in the form of environmental themes in vehicle subjects such as geography, history, biology, physics and other science subjects. According to (Knapp2000), this option involves a block approach in which separate and distinct environmental education courses are offered." The main disadvantage of this option is that the effective teaching of the environmental themes would depend on the personal commitment and competence of the teachers. Additionally, the themes covered might not have any direct relationship with local environmental issues.

The third option is the integration or infusion of EE into carrier subjects such as science, geography and history. The second and third options are interdisciplinary approaches. According to the Tbilisi principles and NGO Forum principles (Irwin & Lotz-Sisitka, 2005), EE in the school curriculum

should be interdisciplinary. This means that the environmental themes and concepts which are integrated or infused in different subjects at secondary school level can be studied from different perspectives, for example science, geography, history etc. (Loubser, 1997). The perspectives from different subjects are likely to give a holistic approach to each environmental issue (Palmer, 1997). Observations have shown that the teaching of such subjects as geography, geology, biology, physics and chemistry give students the ecological perspective. However, teaching EE within school subjects tends to fragment the EE concepts, making it difficult to implement the holistic perspective and to achieve values education (Coleman & Garlick, 2005). According to (UNESCO, 1977), the most effective model involves a complete overhaul of the curriculum. Curriculum change could include the introduction of new content that incorporates EE concepts, practical work and pedagogical approaches underpinned by progressive theories of education. (UNESCO, 1977).

The advantage of this model is that it is possible to align curriculum goals with those of education for sustainability (Huckle & Stirling, 1996). An illustration of this option is the South African primary and lower secondary education, (GET band Grades R-9), where cross-curricular approaches to teaching and learning content are followed (Loubser, 1997). Boundaries between different subjects have been removed to create learning areas. There are thus more opportunities for implementing a holistic approach in the teaching and learning of EE at this level (Le Grange, 2003).

2.4 Environmental Education in Schools.

Despite the fact that environmental education grew gradually and reluctantly in the initial 20 years, the most recent 20 years have encounter a critical development in environmental education programs. Thus, numerous essential, auxiliary, and advanced education schools over this country have been expanding endeavors to coordinate environmental points into their educational modules. (Venkataraman, 2008) As indicated by looks into done, a developing group of proof backings the hugeness of environmental education to formal education in giving positive understudy results in the zones of math, perusing, and science accomplishment (Ernst, 2007). Solid proof proposes that

all around composed environmental education programs in essential and optional schools, not just enhance understudies' learning and dispositions toward nature, additionally enhance understudies' execution in school. A 10-year consider by the National Environmental Education Establishment and Roper Open Undertakings demonstrated that essential and optional education with an environmental concentration that uses a basic intuition way to deal with environmental issues enhanced understudies' perusing, composing, and critical thinking abilities (Venkataraman, 2008).

Extra reviews by (Athman & Monroe, 2004) propose that environmental education can enhance basic considering, math, life science abilities, and government sanctioned test execution. Regardless of the potential for enhancing understudy learning, analysts have discovered that an absence of educator preparing in environmental education is a noteworthy boundary to consolidating it completely in the school educational modules (Ernst, 2007). As indicated by the College of Maryland Review Exploration Center (2002), just around 10% of educators have taken courses in environmental education as a component of their save planning program (Ernst, 2007). This is on the grounds that the projects that have been set up by these educators concentrates more on branches of knowledge in disconnection, environmental points generally can be followed back on built up train based subject courses, strikingly science courses. Consequently, instructors seldom have the expansiveness of foundation and sought profundity to sufficiently cover environmental subjects (Forces, 2004). In light of these worries, offices, for example, the Environmental Insurance's Office of Environmental Education and associations that incorporate the North American Relationship for Environmental Education (NAAEE) and the National Environmental Education Establishment have quickened production of educational module and expert advancement for educators (Venkataraman, 2008). There is boundless open support for environmental education, with 95% of grown-ups and 96% of guardians supporting environmental education in government funded schools. Notwithstanding, many schools have diminished their environmental education spending plans to meet the testing and educational

programs prerequisites of government education enactment known as the (Coyle, 2005).

The progress of schools is followed with respect to the gauges set by the state and implemented by punishing schools that don't meet yearly objectives (Cronin et al., 2005). This has affected the academic instructing of environmental education in schools. Due to the accentuation on accomplishment in a couple of the conventional scholastic subjects, schools the nation over redirect time and assets far from cross-disciplinary projects and teaches (Feinstein, 2009). Schools have likewise been compelled to dedicate a lot of time and regard for directing the tests. With a specific end goal to meet these requests, assets are regularly detracted from guideline and developments that are not straightforwardly identified with accomplishing high-test scores are debilitated (Feinstein, 2009). A run of the mill case is the situation of California in the Unified Conditions of America to battle the developing requirement for environmental literacy in schools, at that point California Assemblywoman Fran Paley wrote enactment in 2003 that commanded California to build up a domain based educational modules to be accessible to all schools. The program it sent in movement, known as the Education and Condition Activity (EEI), brought about the improvement of a K-12 show educational modules lined up with statewide Condition Principals and Ideas (EP&C) and California's scholarly substance benchmarks ("California Environmental protection agency Education and Environment Initiative" 2012).

The State Training board endorsed the EEI educational programs in 2010. Clearly the fundamental objective of EEI was to help in the readiness understudies to commendable and capable environmental stewards and also tomorrow's pioneers of science, market analysts, and sustainability innovation. At present, school areas are getting conceded as take an interest in EEI, and expert advancement workshops are being offered to region level training pioneers to disperse EEI educational modules. Despite the fact that EEI educational modules will be made available to educators both in an online stage and through course books, it won't be obligatory for schools to execute EEI educational modules. In that capacity it will be important to give a type of

effort to class areas and a reoccuring proficient develop for K-12 instructors. Also, assessment and evaluation of EEI educational programs are important to build up the viability of the EEI educational programs (California Environmental Insurance Organization Instruction and the Environment Activity Stages and Course of events, 2012).

2.4.1 Environmental Education in Libya

Being a lead route to a few countries in Europe, Libya receives the EU charter that perceives that each individual is qualified for an environment helpful for the most elevated achievable level of wellbeing and prosperity (Bindra 2008). The contract underlines the mutual obligations of people, open specialists and economic divisions in the public eye for securing such an environment; and it traces standards for open arrangement. Prior to the Earth Summit 1992 Conference on Environment and Improvement (UNCED), WHO set up a Commission on Wellbeing and Environment whose report, entitled "Our planet, our wellbeing" (Bindra, 2008), that was supported by the World Wellbeing Gathering in May 1992 and furnished UNCED with a thorough audit of the world wellbeing circumstance in connection to the environment and advancement. (UNCSD Rio+20 Point of convergence), Libya advances and backings WHO defined new worldwide methodology for wellbeing and environment which was supported by the World Wellbeing Get together in 1993. The Libyan technique is in accordance with WHO procedure in building up a binding together system work arranges and the exercises that are expected to accomplish, at worldwide, local and nation levels. WHO Local Office in Cairo has helped the nation on data frameworks, systems for trading knowledge and facilitated ponders.

2.5 Developing Environmentally Responsible Behaviors.

Environmental education projects are outfitted towards individual experiential learning, to build up the environmental affectability of understudies, and full of feeling connections to the regular habitat (Palmberg & Kuru, 2000). All around composed environmental education projects can prompt the coveted results passed on in The Belgrade Contract and Tbilisi Assertion (Venkataraman, 2008). In any case, all together for environmental

education projects to satisfy the objectives set out by the Tbilisi Announcement, they should concentrate on inspiring learners to take part in environmentally capable practices. ERBs happen when an individual plans to make the wisest decision with a specific end goal to help secure the environment in general every day practice and conduct (Cottrell, 2003).

There is much civil argument over the best indicators of environmentally dependable conduct. The vast majority of the present examination on ERBs originates from social-mental theories of human conduct and draws upon theories, for example, the standard actuation demonstrate (Schwartz, 1977), the theory of contemplated activity (Ajzen & Fishbein, 1980), and the theory of arranged conduct (Ajzen, 1991). Ajzen and Fishbein's (1980) model of contemplated activity shows that the person's aim to act directly affects conduct. Models that look at the cooperations between socio statistic, intellectual, and mental, circumstance, passionate, and social situational indicators of ERB have been produced by a few analysts to better understand the best indicators of ERBs and expectations to act (Stern, 2000). A deliberately created meta-examination of 128 reviews (Hines et al., 1987) recognized a little arrangement of factors that have been appeared to connect more than once with ace environmental conduct.

The most intense of these components incorporate learning, verbal sense of duty regarding aims to act, locus of control, demeanor, and moral obligation. Hungerford and Volk (1990) based on the Ajzen and Fishbein investigation, proposing another model of changing learner conduct through environmental education. Their multilevel model of environmental conduct fuses three levels of factors that have been distinguished as having a definitive effect of ERBs in a successive manner. To begin with, passage level factors that incorporate environmental learning and affectability to nature work as essential factors that improve a man's basic leadership once an activity in attempted. Second, possession factors that make environmental issues unmistakable and relatable to the learner, enable the individual to feel an individual feeling of responsibility for issues and make a feeling of responsibility and a locus of control that are upgraded through information and individual interest in an environmental issue. Third, strengthening factors that incorporate learning and

saw expertise in utilizing environmental activity systems and locus of control give an individual a feeling of enablement that the individual can have any kind of effect as it identifies with a specific issue. Furthermore, goal to act is viewed as a strengthening variable as it is firmly identified with both seen expertise in making a move and locus of control. As indicated by Hungerford and Volk (1990), these empowerment variables are likely the cornerstone of training in environmental education

2.6 Importance of Environmental Education to Young Students.

In a meta-investigation by Zelenzy (1999) on the viability of educational mediations in classrooms and nontraditional settings, environmental encounters were found to most successfully enhance here and now environmental information and expectations to act when the educational module was hands-on and in light of encounters in the open air environment. Specifically, Zelezny discovered that dynamic and hands-on educational mediations including upper basic understudy members (third – fifth grades) were best in enhancing environmental conduct and intercession viability. As indicated by humanist Kellert (2005), middle adolescence is a period when kids frame a feeling of ponder and enthusiastic connection to their characteristic environment and is referred to by most grown-ups thinking back as a candidly basic part of their youth.

These examples of close drenching in nature frequently end up noticeably singed in memory, are reviewed all through a man's life, and have been appeared to decidedly rouse environmental ethics in grown-ups (Chawla, 2006). Environmental researcher Carson stated, "For the kid . . . it is not half so imperative to know as to feel. In the event that truths are the seeds that later create information and astuteness, then the feelings and the 13 impression of the faculties are the ripe soil in which the seeds must develop" (Carson, Ponder, 1998,). Sadly, there has been a generous decrease in open air, experiential learning in late decades. Explore demonstrates that youngsters are investing half less energy outside than they did 20 years prior. Today, the normal youngster spends over six hours a day staring at the TV, working a PC, or playing computer games (White, 2008).

The potential mental and wellbeing impacts caused by nature shortfalls are referred to in an approach activity arrange created by White, chief of education backing for the National Untamed life League. Specialist’s caution that future may really decrease without precedent for American history from the wellbeing effects of youth corpulence, which has been connected to absence of recess outside. Further research has demonstrated that time in nature can enhance a kid's scholarly execution, fixation, coordination, and confidence and in addition conceivably diminishing the seriousness of side effects of Consideration Deficiency Hyperactivity Issue (ADHD) which influences a large number of American youngsters (White, 2008).

In light of the developing acknowledgment of the significance of experiential environmental education, the U.S. Place of Agents passed the No Child Left inside Act (NCLI) in 2008. This bill approved government cash for states to make arranges clarifying how their understudies will find out about environmental issues and to get ready 14 instructors to educate about such issues. All through the enactment, "hands-on field involvement" for understudies and instructors was referred to as a basic part to achieving the authoritative plan of the bill (as referred to in Hoff, 2008). Lamentably, strategic hindrances, for example, absence of arranging time, authoritative support, transportation, and subsidizing, have made it progressively troublesome for schools to join this part of the NCLI enactment. What's more, because of weakening cuts in the government funded education division, environmental education projects are progressively being asked for by schools and donors to give confirmation of their long haul viability.

CHAPTER III

METHODOLOGY

This chapter talks about the methods of analysis that was employed in the research, what was necessary to be investigated, as well as the purpose of the investigation.

The methods of analysis employed in the research was the quantitative method which involved the collection of data as well as the analyzing of the collected data.

3.1 Quantitative Method

The quantitative method was carried out with the use of a questionnaire survey. The questionnaires were distributed across some secondary schools in Libya and was duly completed by the teachers of the schools where the questionnaires were distributed. Basically these schools were secondary schools and the importance of the completion of this survey cannot be over emphasized. In total 520 questionnaires were distributed, and 500 questionnaires were retrieved. The researchers intended to investigate the possible causes of environmental problems and the environmental educational standards of the schools. The survey questionnaires is designed in such a way that it contains 3 parts the first part contains a letter by the researcher requesting the participation of the correspondence, the second part contains questions regarding general information of the participant and the school and the last part contains questions relating to the environmental education.

3.2 Survey Target Population

The target population were secondary school teachers in Libya and the target of the researcher was 500 teachers in 21 secondary schools in Libya.

3.3 Analysis

The analysis of the data's obtained from the questionnaires was done using the SPSS 20 software that helped in analyzing the data and converting them into descriptive results that was useful for drawing an achievable conclusion.

CHAPTER IV

4.0 Results

Frequency Table

Table 4.0.1Statistics for School

School		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MujahidHyub Al Marhoun	25	5.0	5.0	5.0
	SulaimanKhater School	25	5.0	5.0	10.0
	FtatOrouba	25	5.0	5.0	15.0
	Alsti Omar School	25	5.0	5.0	20.0
	AlrabiaAlrbie School	25	5.0	5.0	25.0
	Al-Zahra	25	5.0	5.0	30.0
	Alseda Khadija	25	5.0	5.0	35.0
	Martyr Ibrahim Azzouz School	25	5.0	5.0	40.0
	Al-Manar	25	5.0	5.0	45.0
	Umm Al-Jorsan	25	5.0	5.0	50.0
	Al-Bayda	25	5.0	5.0	55.0
	Al-Shula	25	5.0	5.0	60.0
	Al-Shouri	25	5.0	5.0	65.0
	Ftat Libya School	25	5.0	5.0	70.0
	Omar Bin Al-Aas	25	5.0	5.0	75.0
	Nasser School	25	5.0	5.0	80.0
	Mnahel Africa School	25	5.0	5.0	85.0
	Nusseibah Bent Ka'b	25	5.0	5.0	90.0
	Al Rajban Central	25	5.0	5.0	95.0
	Ahmed Al-Badawi	25	5.0	5.0	100.0
	Total	500	100.0	100.0	

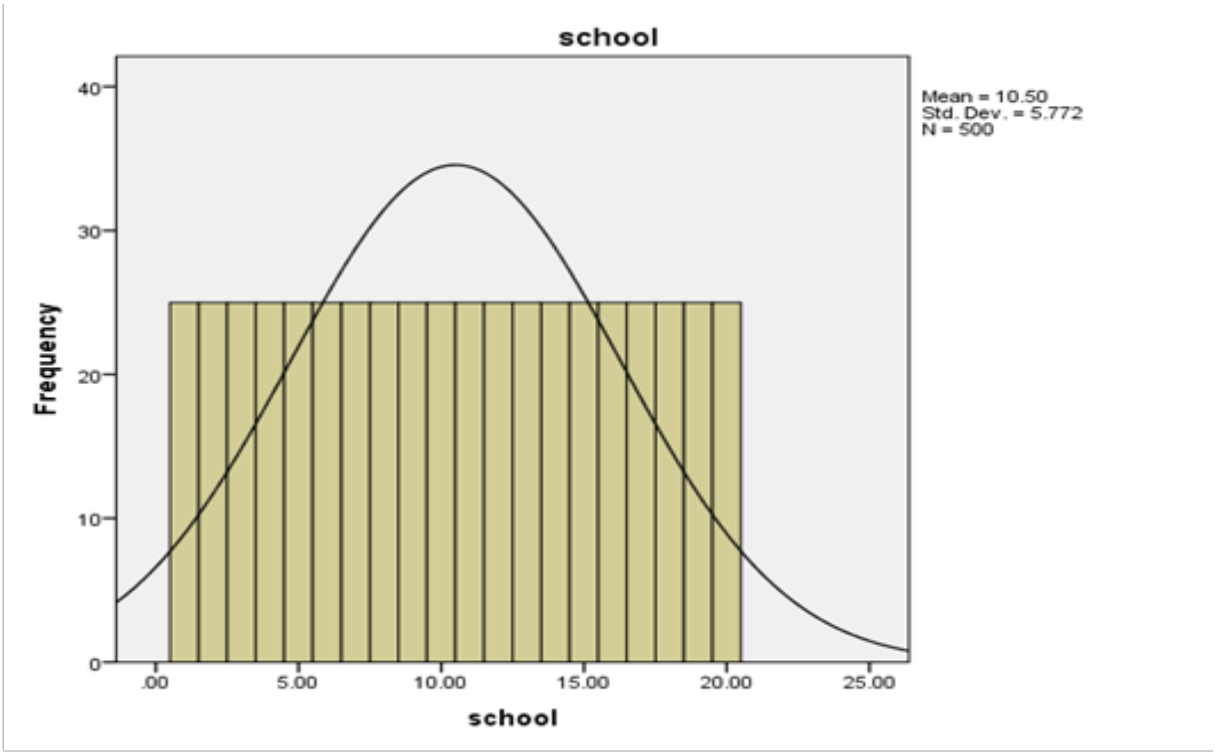

Figure 4.0.1 High Schools

Table 4.0.2: Statistical Distribution for Age

	Frequenc	Percent	Valid Percent	Cumulative Percent
26-30	65	13.0	13.0	13.0
31-35	61	12.2	12.2	25.2
36-40	76	15.2	15.2	40.4
41-45	99	19.8	19.8	60.2
46-50	138	27.6	27.6	87.8
50 and above	61	12.2	12.2	100.0
Total	500	100.0	100.0	

The table above shows that 13.0% of the respondents are between 26-30years, 12.2% (31-35years), 15.2% (36-40years), 19.8% (41-45years), 27.6% (46-50years) and 12.2% (50 and above) years of age.

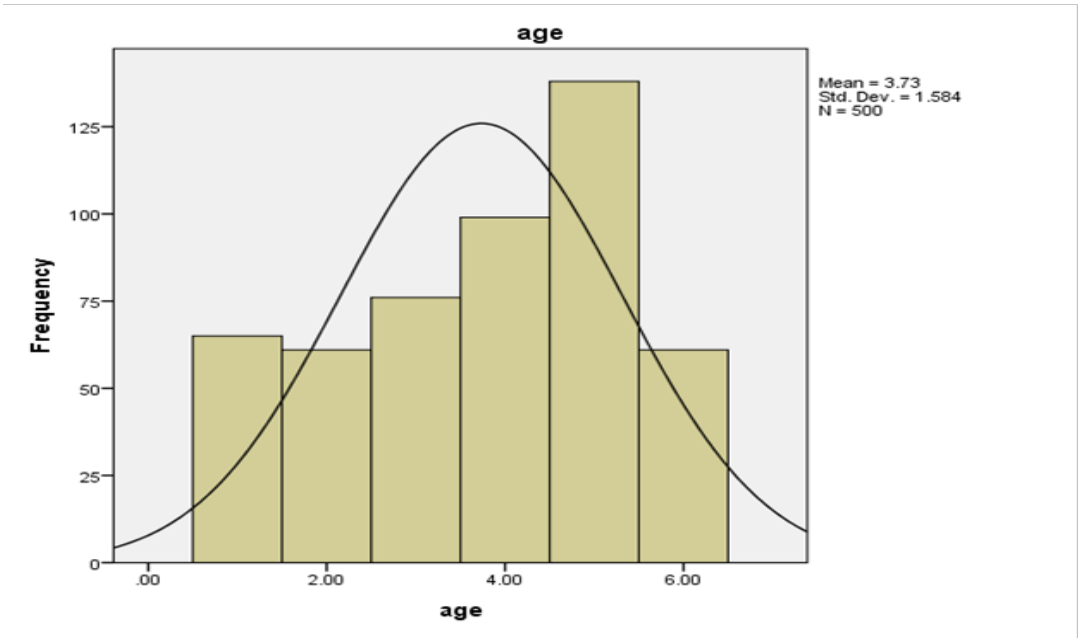

Figure 4.0.2 High School Age

Table 4.0.3. Department

	Frequency	Percent	Valid Percent	Cumulative Percent
Biology	71	14.2	14.2	14.2
Sociology	54	10.8	10.8	25.0
Psychology	66	13.2	13.2	38.2
Technology	202	40.4	40.4	78.6
Pharmaceutical	107	21.4	21.4	100.0
Total	500	100.0	100.0	

The table above shows that 14.2% of the respondents are in Biology department, 10.8% in sociology, 13.2% in Psychology, 40.4% in Technology, and 21.4% in Pharmaceutical department.

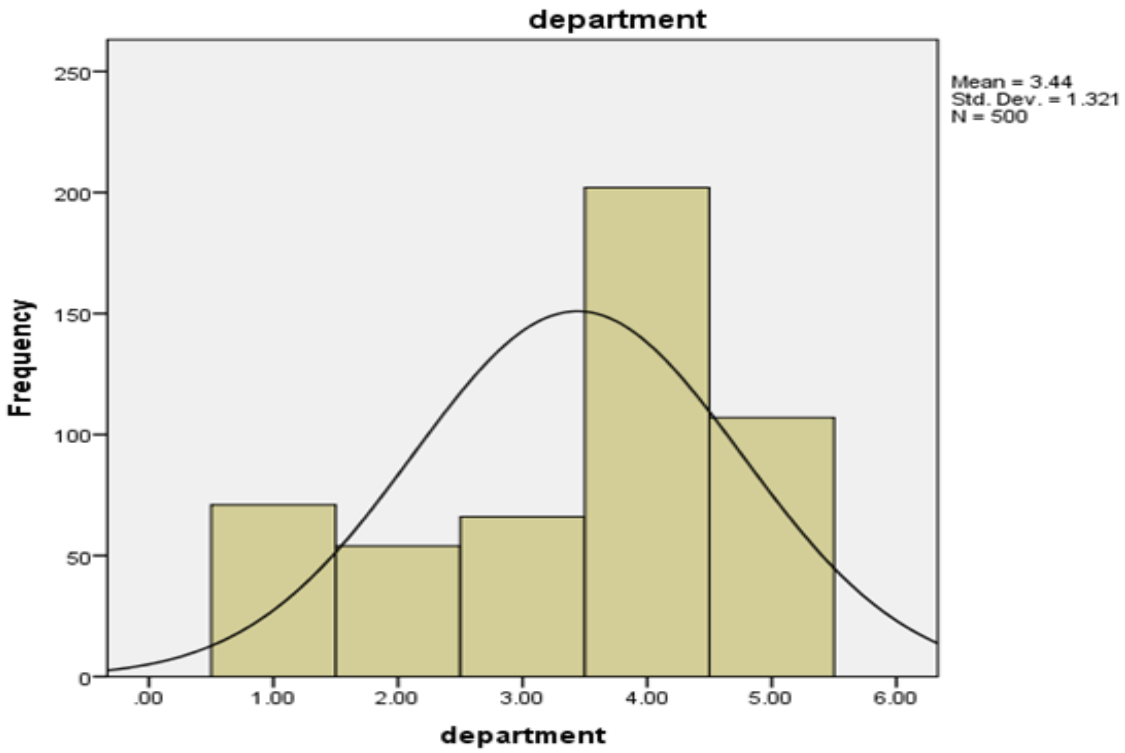

Figure 4.0.3 Department

Table 4.0.4. Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	285	57	57	57
Female	215	43	43	100
Total	500	100	100	

The table above shows that 285(57.0 %) of the respondents are male and 215(43.0%) are female.

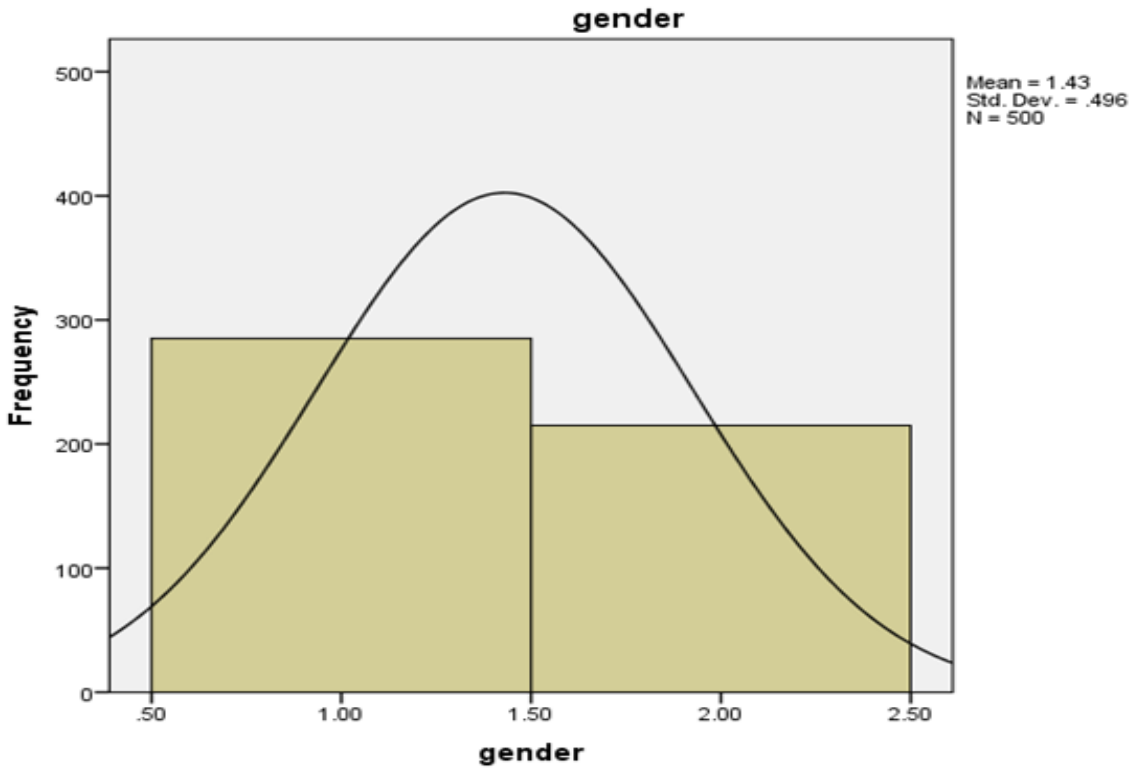

Figure 4.0.4 Gender Frequencies of Nationality

Table 4.0.5. Nationality

	Frequency	Percent	Valid Percent	Cumulative Percent
Libyan	455	91	91	91
Others	45	9	9	100
Total	500	100	100	

The table above shows that 455(91.0 %) of the respondents are Libyans and 45(9.0%) are from other nationalities.

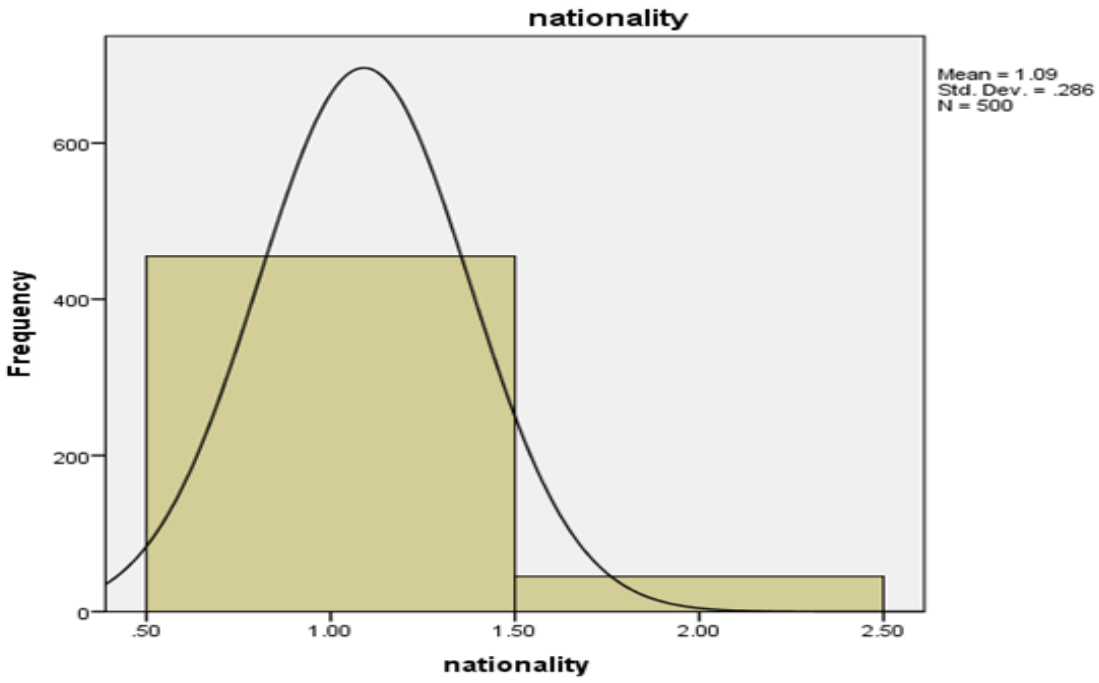

Figure4.0.5 Nationality

Table 4.0.6. Frequency Population of the Area Where You Live

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 500	10	2.0	2.0	2.0
	500-2000	236	47.2	47.2	49.2
	2000-5000	35	7.0	7.0	56.2
	5000-10000	36	7.2	7.2	63.4
	10000-20000	74	14.8	14.8	78.2
	20000-50000	109	21.8	21.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents with respect to the population of the area where they live, It shows that 10(2.0%) of the respondents live in areas less than 500 in population, 236(47.2%) in between 500-2000, 35(7.0%) in areas between 2000-5000, 36(7.2%) in areas between 5000-10000, 74(14.8%) in areas between 10000-20000 and 109(21.8%) in areas between 20000-50000 in population.

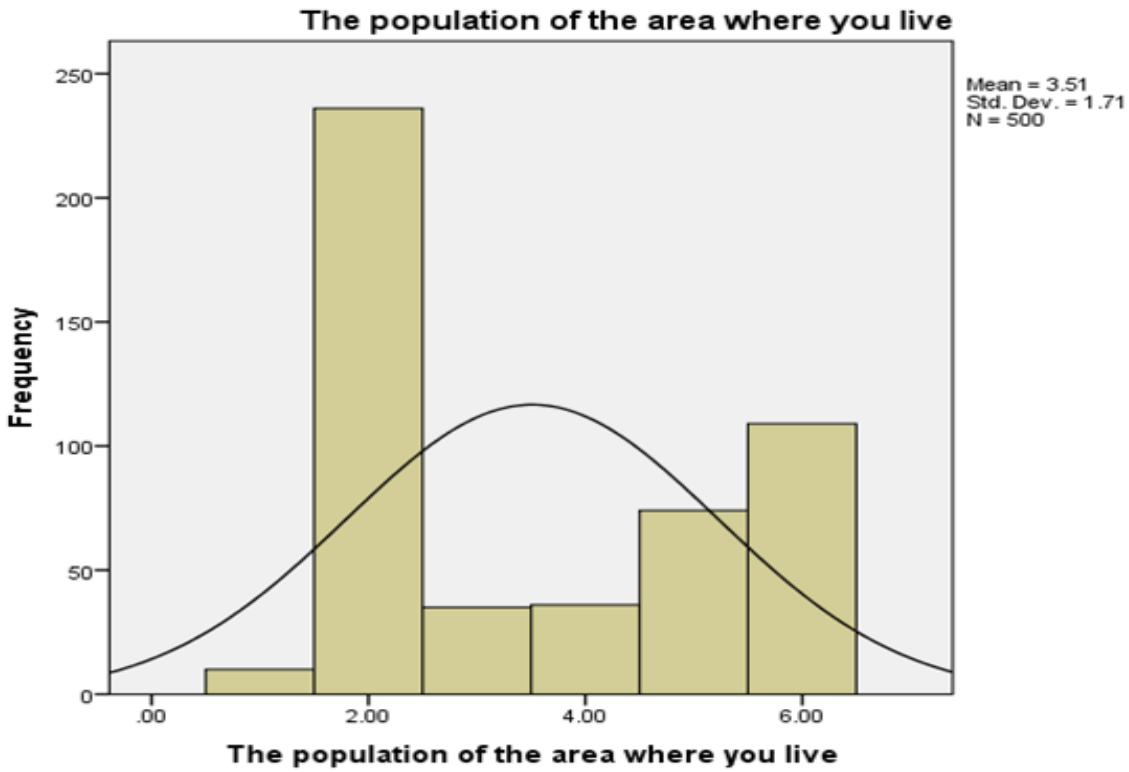

Figure 4.0.6 Frequency Population of the Area Where You Live

Table 4.0.7 Education Status of Parents Mother

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Elementary	50	10.0	10.0	10.0
	Primary	100	20.0	20.0	30.0
	Secondary	150	30.0	30.0	60.0
	Bachelors	100	20.0	20.0	80.0
	Postgraduate	100	20.0	20.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents education status of parents mothers, it shows that 50(10.0%) of respondents education status were Elementary, 100(20.0%) were primary, 150(30.0%) were Secondary, 100(20.0%) Bachelors, and 100(20.0%) of were Postgraduate level.

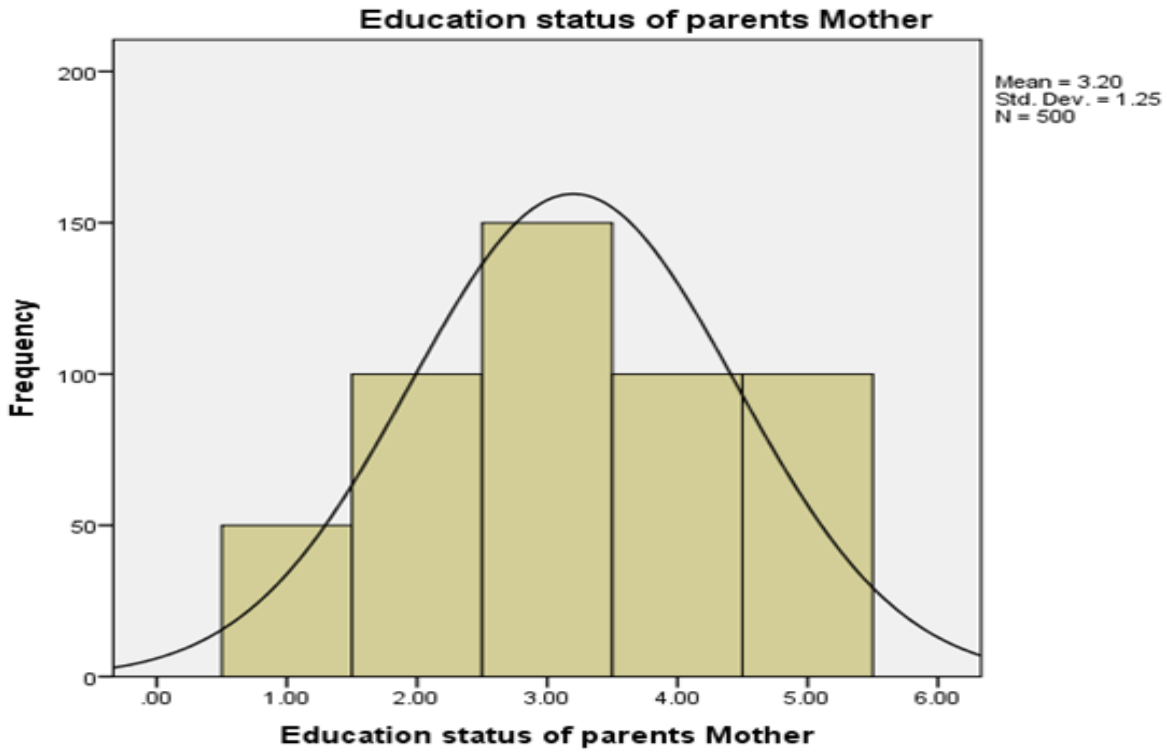

Figure 4.0.7 Education Status of Parents Mother

Table 4.0.8 Education Status of Parents Father

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Elementary	160	32.0	32.0	32.0
	Primary	95	19.0	19.0	51.0
	Secondary	55	11.0	11.0	62.0
	Bachelors	145	29.0	29.0	91.0
	Postgraduate	45	9.0	9.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents education status of parents fathers, it shows that 160(32.0%) of respondents education status were Elementary, 95(19.0%) were primary, 55(11.0%) were Secondary, 145(29.0%) Bachelors, and 45(9.0%) were Postgraduate level.

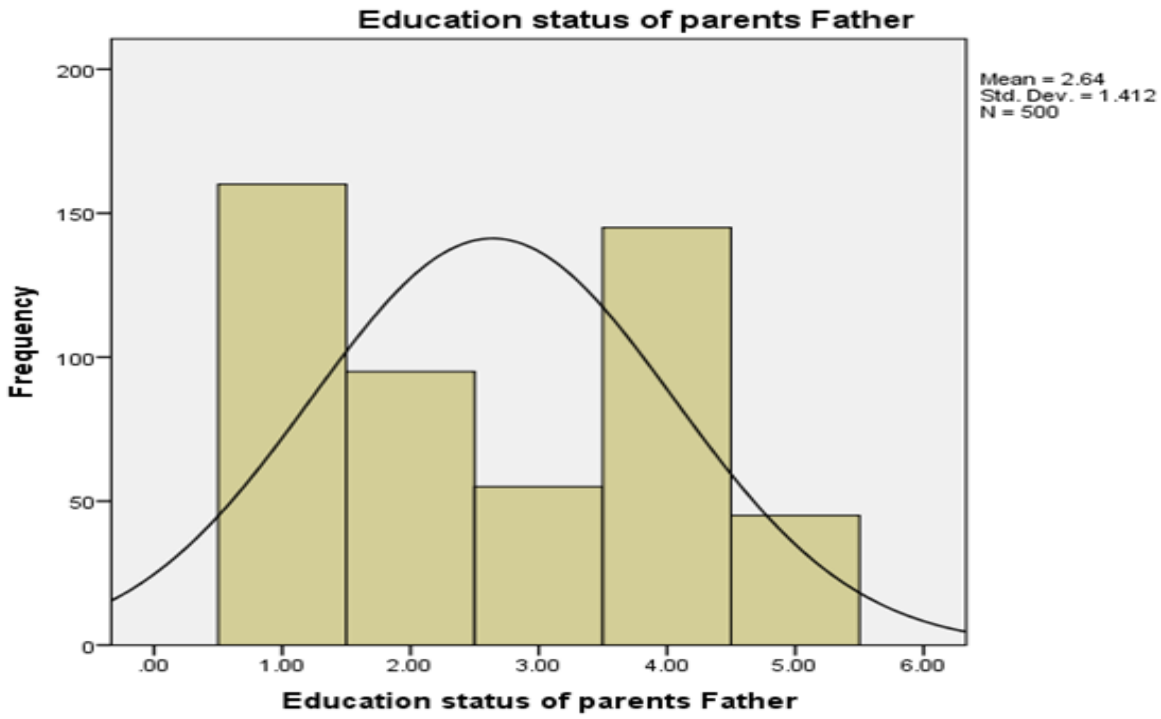

Figure 4.0.8 Education Status of Parents Father

Table 4.0.9 What is Your family Monthly Income?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	less than 1000 D.L	15	3.0	3.0	3.0
	1000 D.L - 2000 D.L	275	55.0	55.0	58.0
	2000 D.L - 3000 D.L	64	12.8	12.8	70.8
	3000 D.L - 4000 D.L	64	12.8	12.8	83.6
	more than 4000 D.L	82	16.4	16.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents with respect to family monthly income.It shows that 15(3.0%) of themhave less than 1000 D.L, 275(55.0%) between 1000-2000 D.L,64(12.8%) between 2000-3000 D.L, 64(12.8%) between 3000-4000 D.L, and 82(16.4%) have more than 4000 D.L family monthly income.

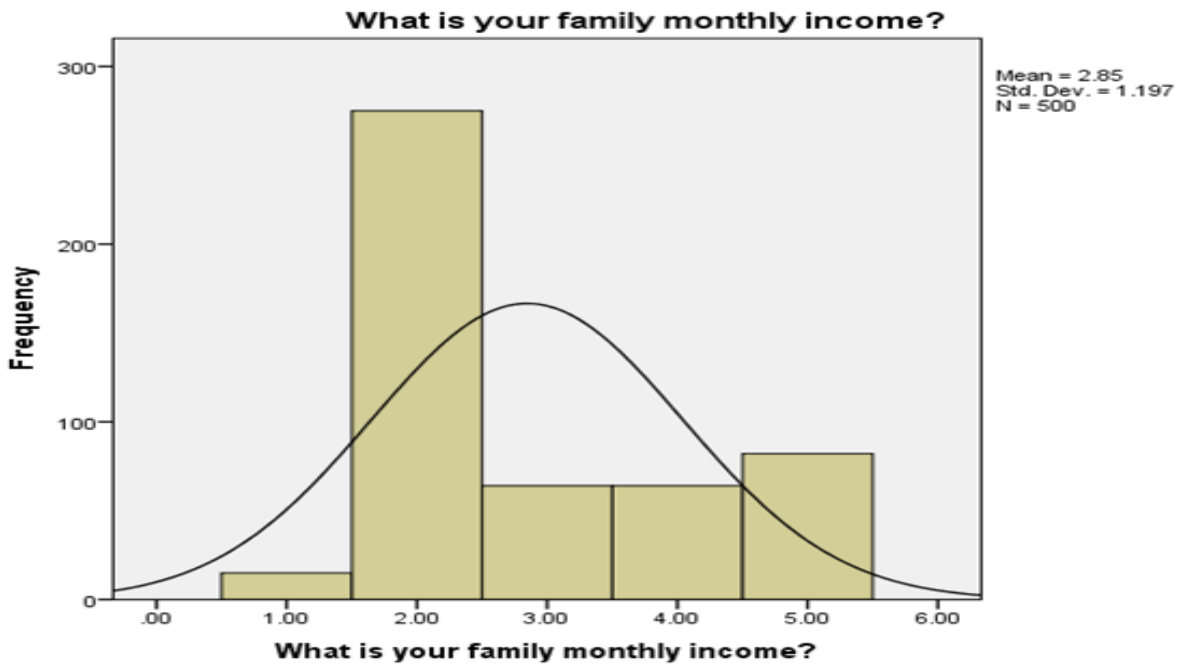

Figure 4.0.9 What is Your Family Monthly Income

Table 4.1.0 Have you Received Any Environmental lessons Before?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	405	81.0	81.0	81.0
	no	95	19.0	19.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion ofHave you received any environmental lessons before, it shows that 405(81.0%) of respondents said yes, and 95(19.0%) said No.

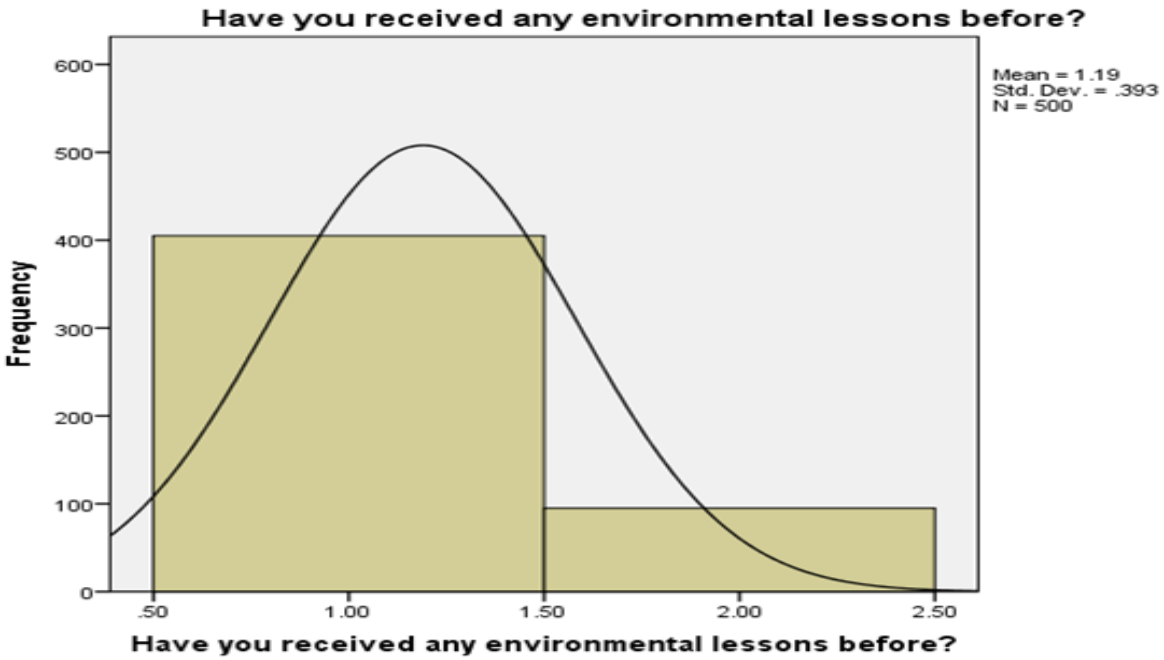

Figure 4.1.0 Have you Received any Environmental Lessons Before

Table 4.1.1 Are you Actively a Member of Any Environmental Group

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	67	13.4	13.4	13.4
	no	433	86.6	86.6	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if Are you actively a member of any environmental group, it shows that 67(13.4%) said Yes, and 433(86.6.0%) said No.

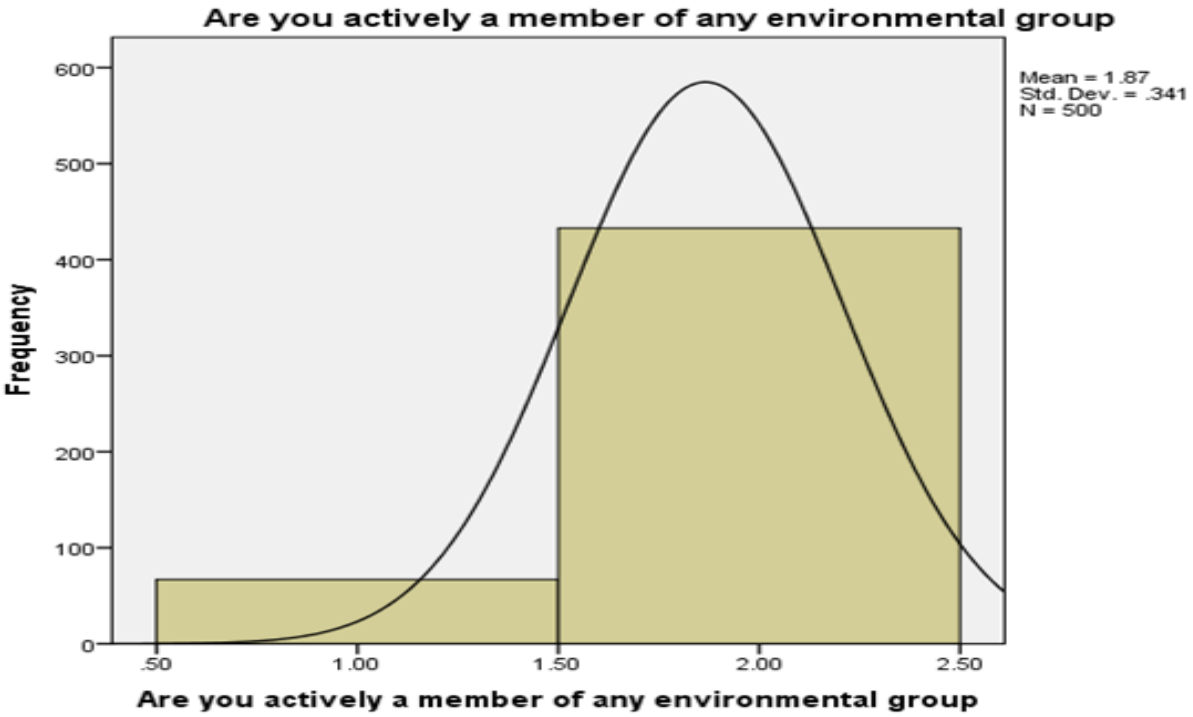

Figure 4.1.1 Are you Actively a Member of Any Environmental Group

Table 4.1.2 I Think Recycling has a Positive Impact on the Environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	252	50.4	50.4	50.4
	Agree	124	24.8	24.8	75.2
	Disagree	62	12.4	12.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion onrecycling having a positive impact on the environment, it shows that 252(50.4%) of respondents strongly agreed, 124(24.8%) agreed, 62(12.4%) disagreed and 62(12.4%) strongly disagreed to this question.

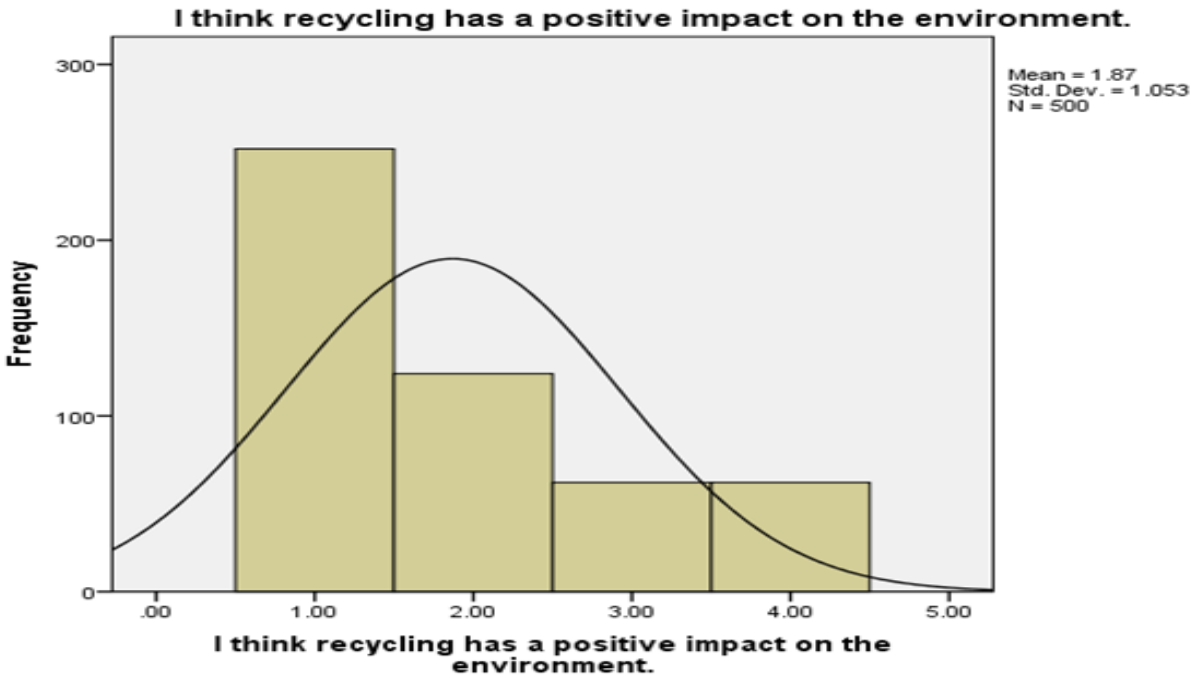

Figure 4.1.2 I Think Recycling has a Positive Impact on the Environment.

Table 4.1.3 I believe my Attitude Towards the Environment Changes When I Watch Environmental Programs on TV.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	249	49.8	49.8	49.8
	Agree	137	27.4	27.4	77.2
	Disagree	52	10.4	10.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if my attitude towards the environment changes when I watch environmental programs on TV, it shows that 249(49.8%) strongly agreed, 137(27.4%) agreed, 52(10.4%) of the respondents disagreed and 62(12.4%) of the respondents strongly disagreed.

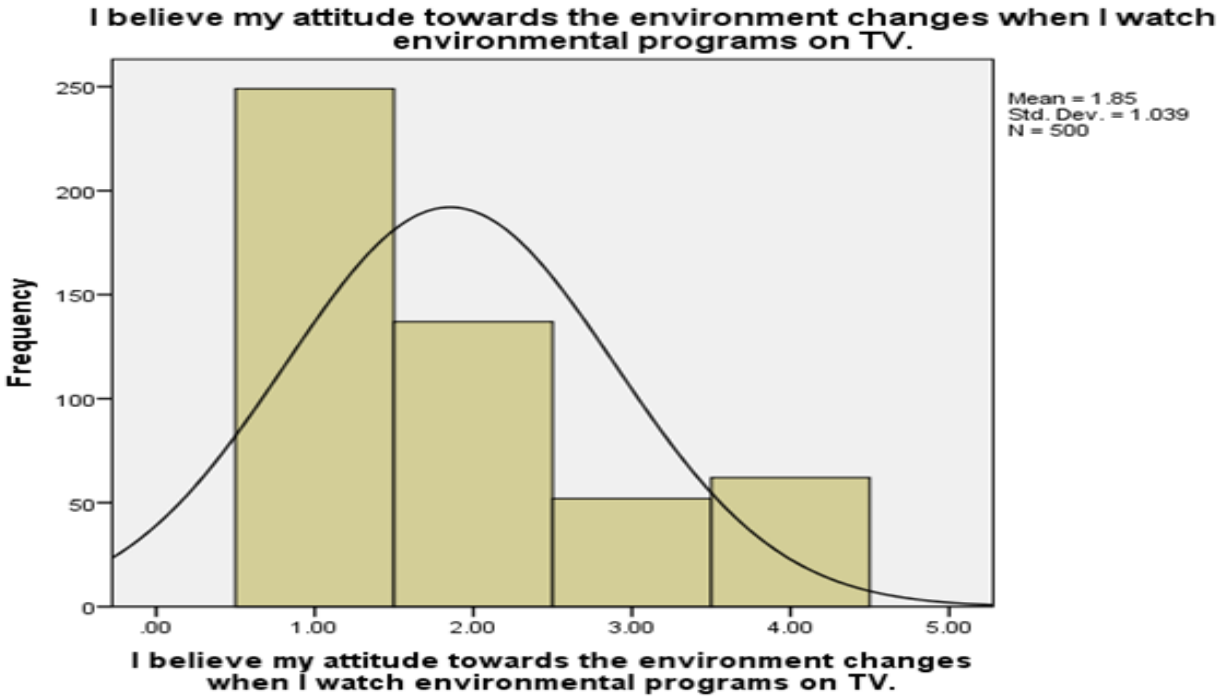

Figure 4.1.3 I Believe my Attitude Towards the Environment Changes When I Watch Environmental Programs on TV.

Table 4.1.4 I read Articles About Environmental Topics.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	234	46.8	46.8	46.8
	Agree	138	27.6	27.6	74.4
	Disagree	66	13.2	13.2	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of read articles about environmental topics, it shows that 234(46.8%) strongly agreed to the thought about reading articles on the environment, 138(27.6%) agreed, 66(13.2%) disagreed and 62(12.4%) of the respondents strongly disagreed.

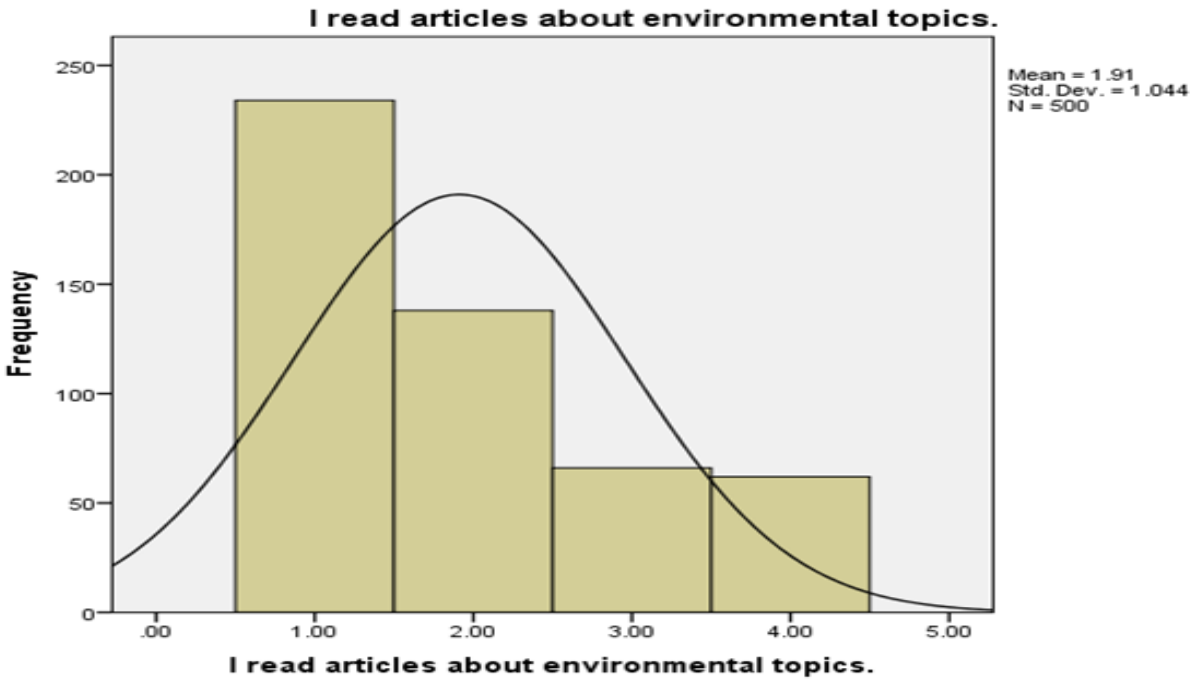

Figure 4.1.4I Read Articles About Environmental Topics.

Table 4.1.5 I am a Member of a Society/Association Related To Environmental issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	244	48.8	48.8	48.8
	Agree	144	28.8	28.8	77.6
	Disagree	50	10.0	10.0	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of being amember of a society/association related to environmental issues, 244(48.8%) of respondents strongly agreed, 144(28.8%) agreed, 50(10.0%) of the respondents disagreed and 62(12.4%) strongly disagreed.

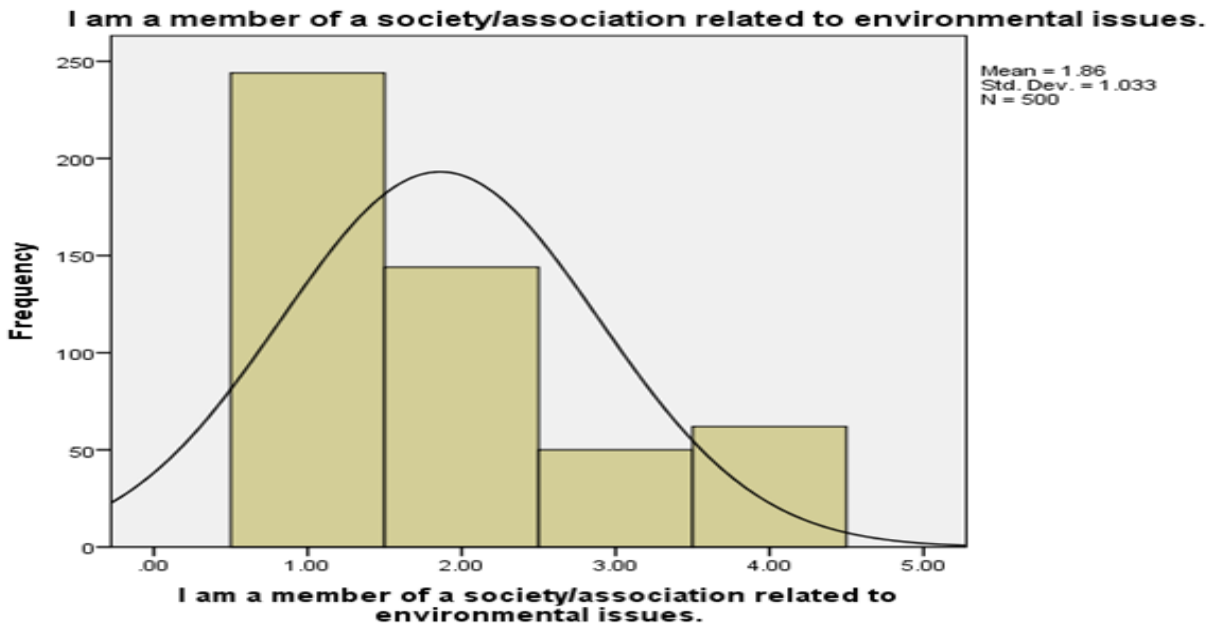

Figure 4.1.5 I am a Member of a Society/Association Related to Environmental issues.

Table 4.1.6 I think it Is Important to Take Action on Environmental Issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	255	51.0	51.0	51.0
	Agree	124	24.8	24.8	75.8
	Disagree	59	11.8	11.8	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on the important of taking action on environmental issues, 255(51.0%) strongly agreed that it is important to take action on the environment, 124(24.8%) agreed, 59(11.8%) disagreed and 62(12.4%) strongly disagreed.

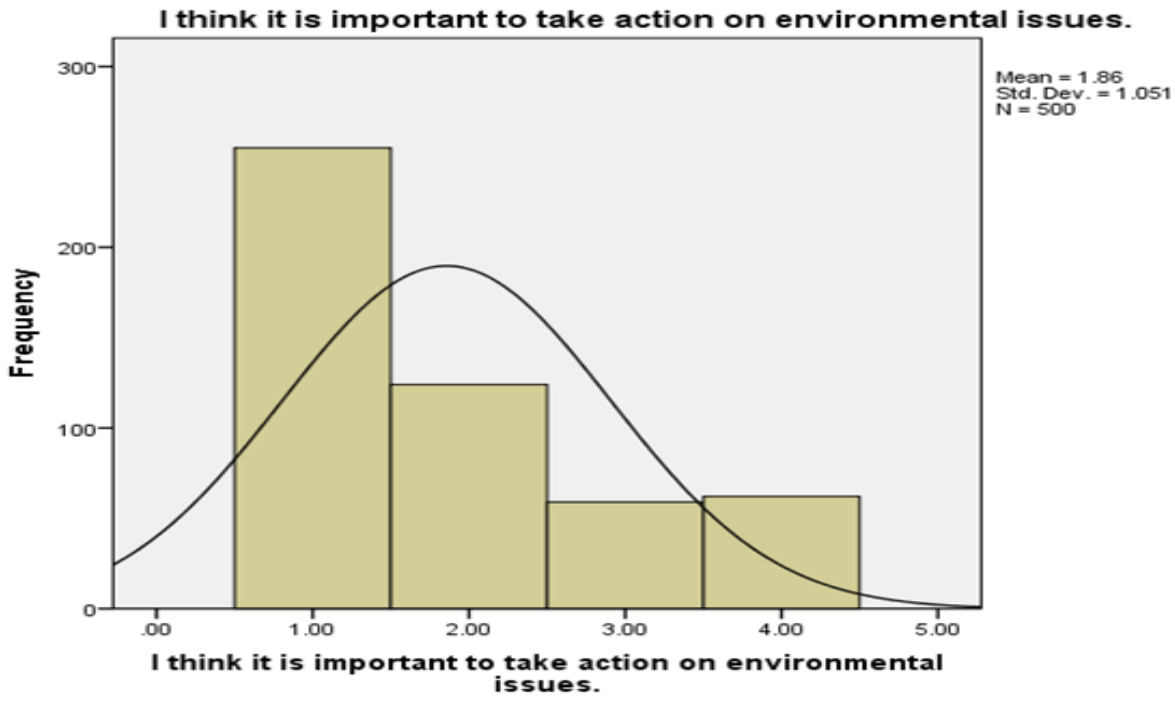

Figure 4.1.6 I think it is Important to Take Action on Environmental Issues.

Table 4.1.7 I believe There Are Individual Responsibilities on the Environmental Sustainability.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	261	52.2	52.2	52.2
	Agree	132	26.4	26.4	78.6
	Disagree	57	11.4	11.4	90.0
	Strongly Disagree	50	10.0	10.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of individual responsibilities on the environmental sustainability, 261(52.2%) strongly agreed that there are individual responsibilities, 132(26.4%) agreed, 57(11.4%) of the respondents disagreed and50 (11.4%) strongly disagreed.

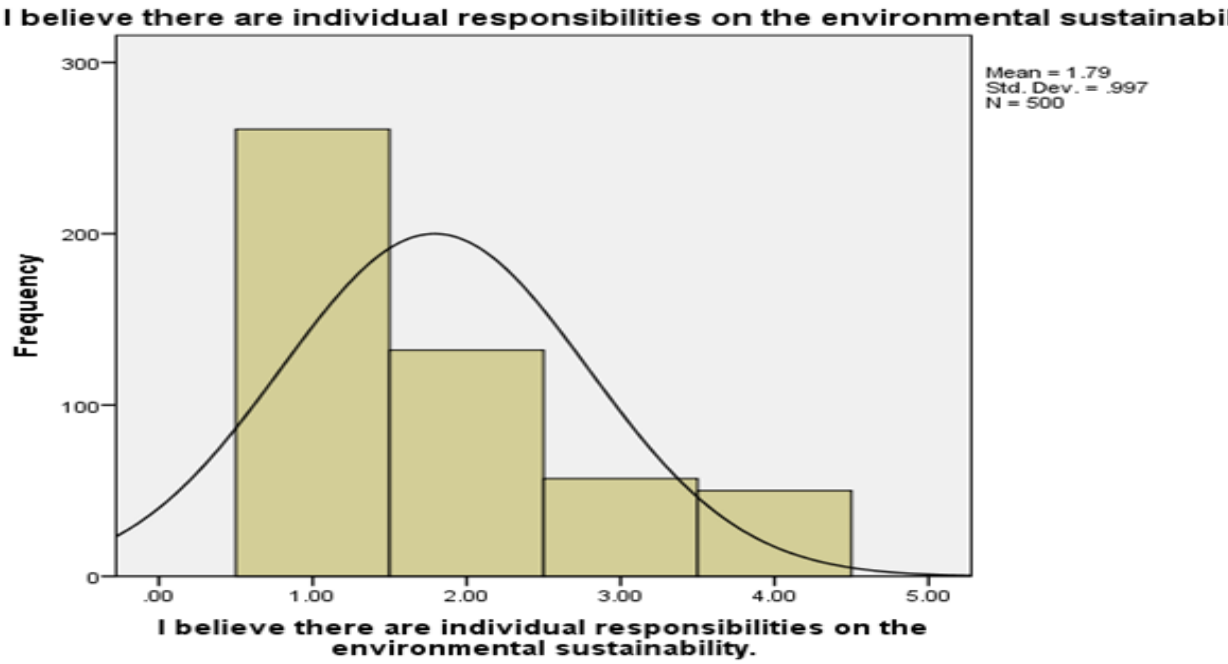

Figure 4.1.7I Believe There are Individual Responsibilities on the Environmental Sustainability.

Table 4.1.8 I am Aware of the Current Strategies used in order to Develop Environmental Issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	124	24.8	24.8	24.8
	Agree	35	7.0	7.0	31.8
	Disagree	256	51.2	51.2	83.0
	Strongly Disagree	85	17.0	17.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of being aware of the current strategies used in order to develop environmental issues, it shows that 124(24.8%) of respondents strongly agreed, 35(7.0%) agreed, 256(51.2%) disagreed and 85(17.0%) strongly disagreed to this question.

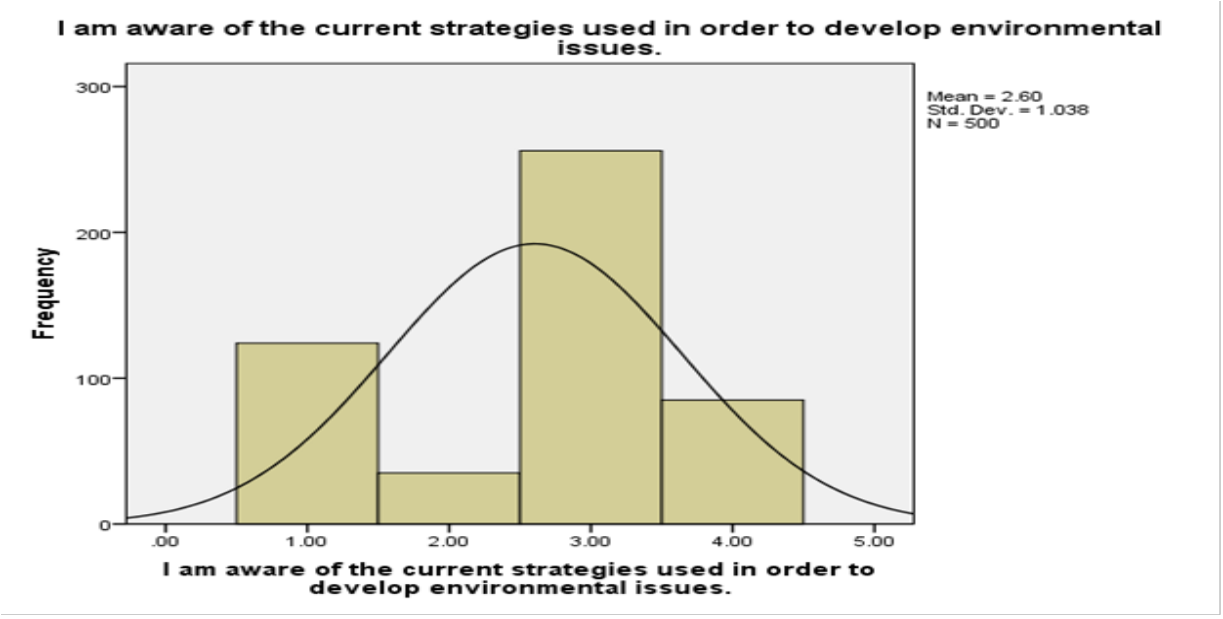

Figure 4.1.8I am aware of the current strategies used in order to develop environmental issues.

Table 4.1.9 I do not consider the environment as a part of me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	112	22.4	22.4	22.4
	Agree	41	8.2	8.2	30.6
	Disagree	262	52.4	52.4	83.0
	Strongly Disagree	85	17.0	17.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if they do not consider the environment as not a part of me, it shows that 112(22.4%) of respondents strongly agreed that the current strategies used, 41(8.2%) agreed, 262(52.4%) disagreed and 85(17.0%) strongly disagreed.

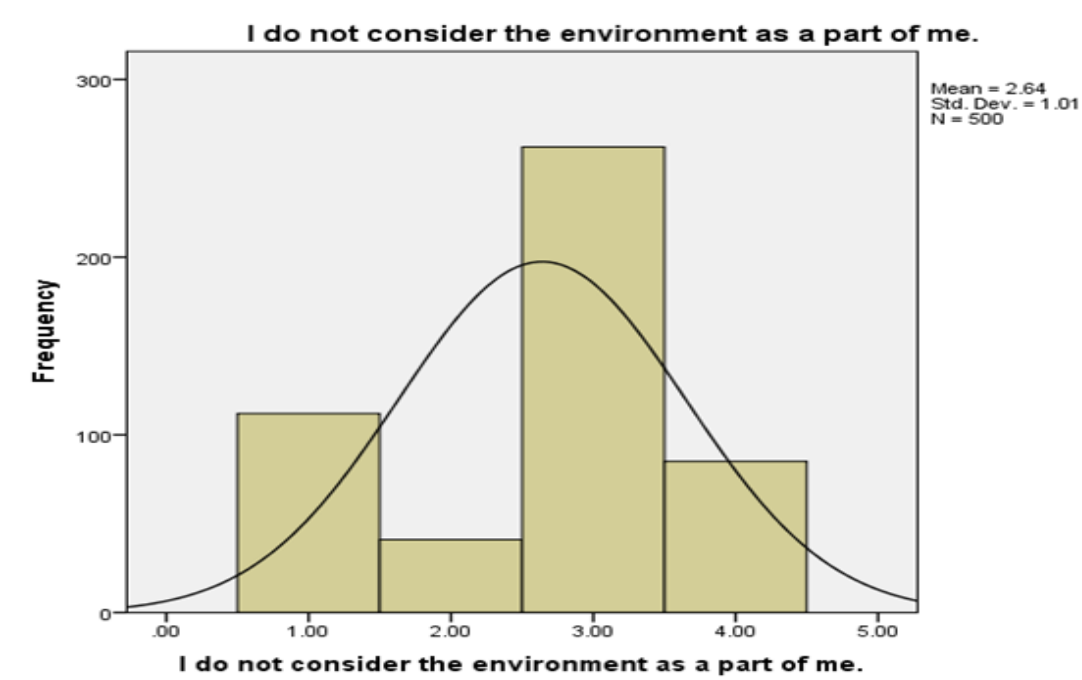

Figure 4.1.9 I do not Consider the Environment as a part of me.

Table 4.2.0 Environment is not Important for me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	110	22.0	22.0	22.0
	Agree	35	7.0	7.0	29.0
	Disagree	246	49.2	49.2	78.2
	Strongly Disagree	109	21.8	21.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of the importance of the Environment for them, it shows that 110(22.0%) strongly agreed, 35(7.0%) agreed, 246(49.2%) disagreed and 109(21.8%) strongly disagreed.

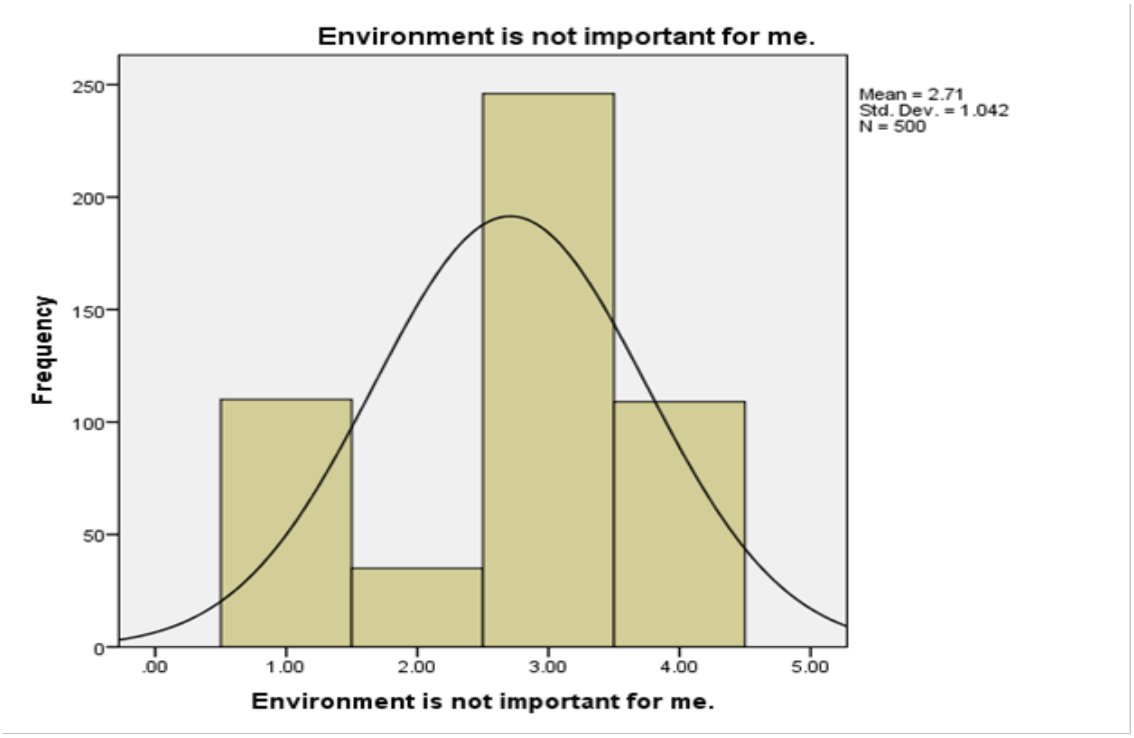

Figure 4.2.0 Environment is not Important for me.

Table 4.2.1 I consider Environmental Responsibility as an Action for a Positive Change.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	285	57.0	57.0	57.0
	Agree	108	21.6	21.6	78.6
	Disagree	54	10.8	10.8	89.4
	Strongly Disagree	53	10.6	10.6	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion ofenvironmental responsibility as an action for a positive change. 285(57.0%) strongly agreed, 108(21.6%) agreed, 54(10.8%) disagreed and 53(10.6%) strongly disagreed.

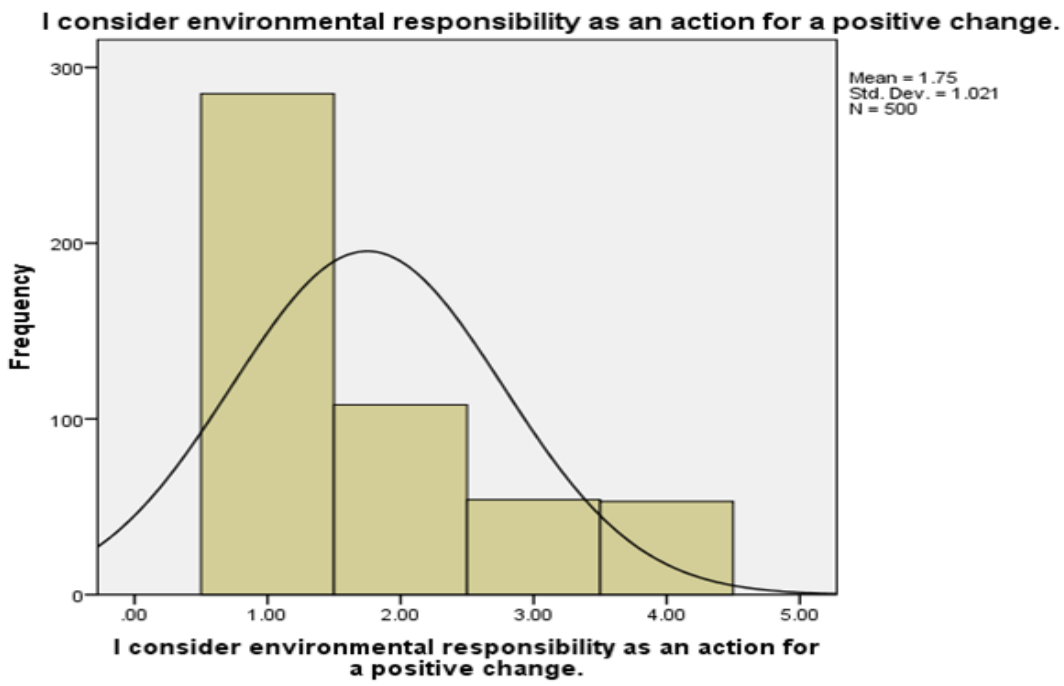

Figure 4.2.1 I Consider Environmental Responsibility as an Action for a Positive Change.

Table 4.4.2 I participate in the Projects Related to the Environmental Education in the Communities I am in.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	249	49.8	49.8	49.8
	Agree	144	28.8	28.8	78.6
	Disagree	53	10.6	10.6	89.2
	Strongly Disagree	54	10.8	10.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of "participating in the projects related to the environmental education in their communities". 249(49.8%) strongly agreed, 144(28.8%) agreed, 53(10.6%) disagreed and 54(10.8%) strongly disagreed with this question.

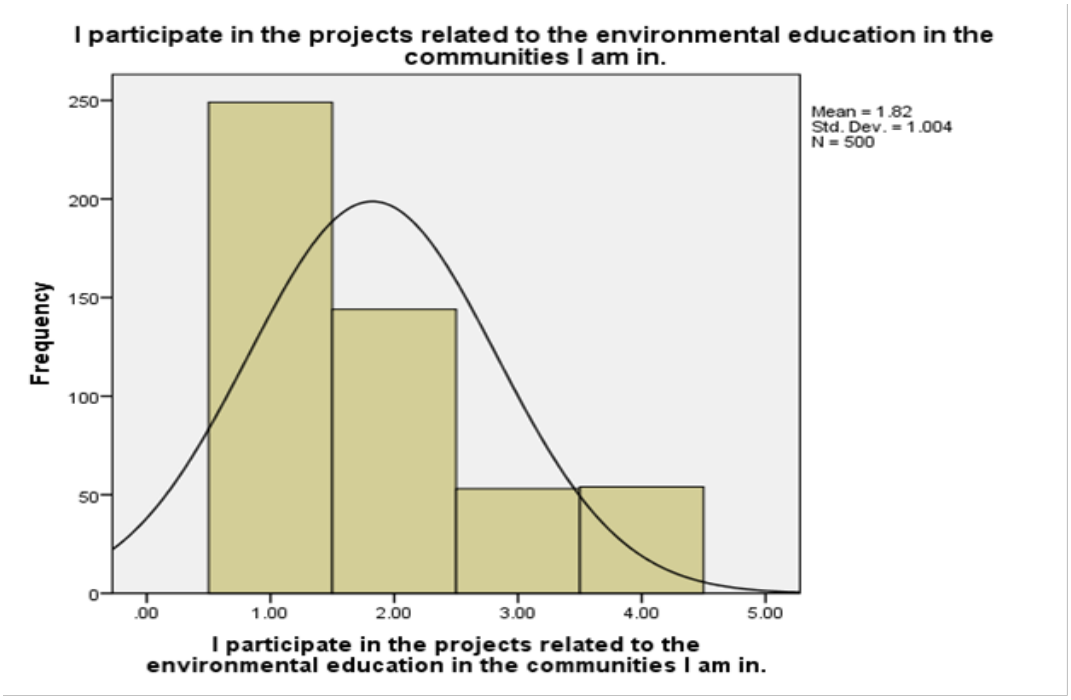

Figure 4.2.2 I Participate in the Projects Related to the Environmental Education in the Communities I am in.

Table 4.2.3 I recycle my Garbage.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	241	48.2	48.2	48.2
	Agree	146	29.2	29.2	77.4
	Disagree	51	10.2	10.2	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of "recycle my garbage", 241(48.2%) strongly agreed, 146(29.2%) agreed, 51(10.2%) disagreed and 62(12.4%) strongly disagreed with this question.

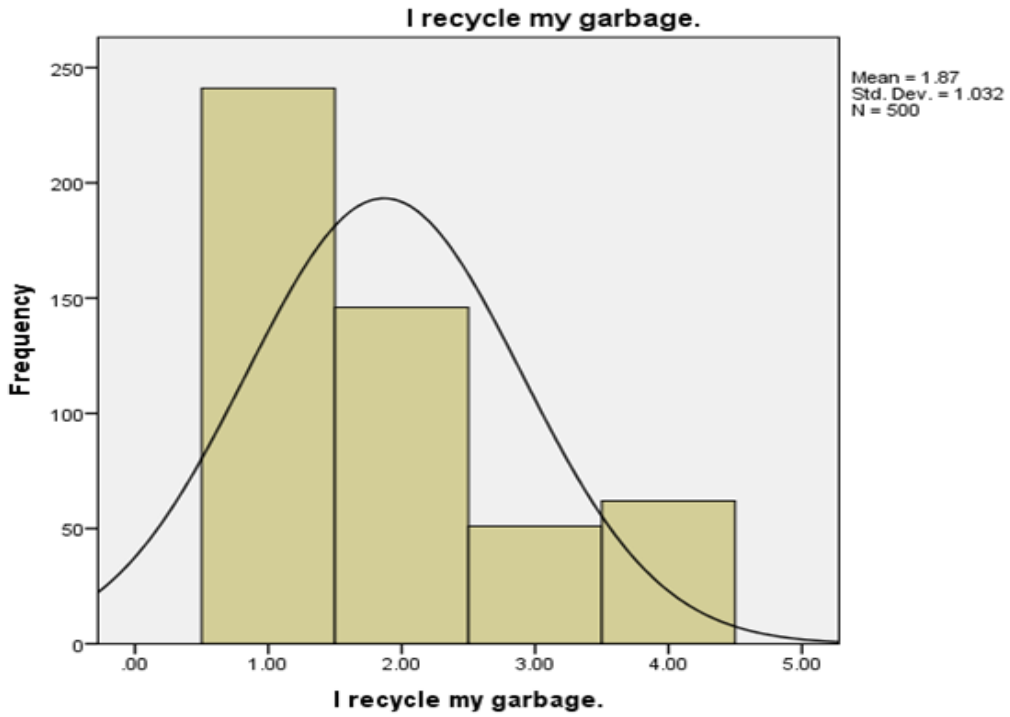

Figure 4.2.3 I Recycle my Garbage.

Table 4.2.4 I thing Environmental Education Contributes to my Individual Development.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	275	55.0	55.0	55.0
	Agree	115	23.0	23.0	78.0
	Disagree	53	10.6	10.6	88.6
	Strongly Disagree	57	11.4	11.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of "the contribution of environmental education to their individual development," 275(55.0%) strongly agreed, 115(23.0%) agreed, 53(10.6%) disagreed and 57(11.4%) strongly disagreed with this question.

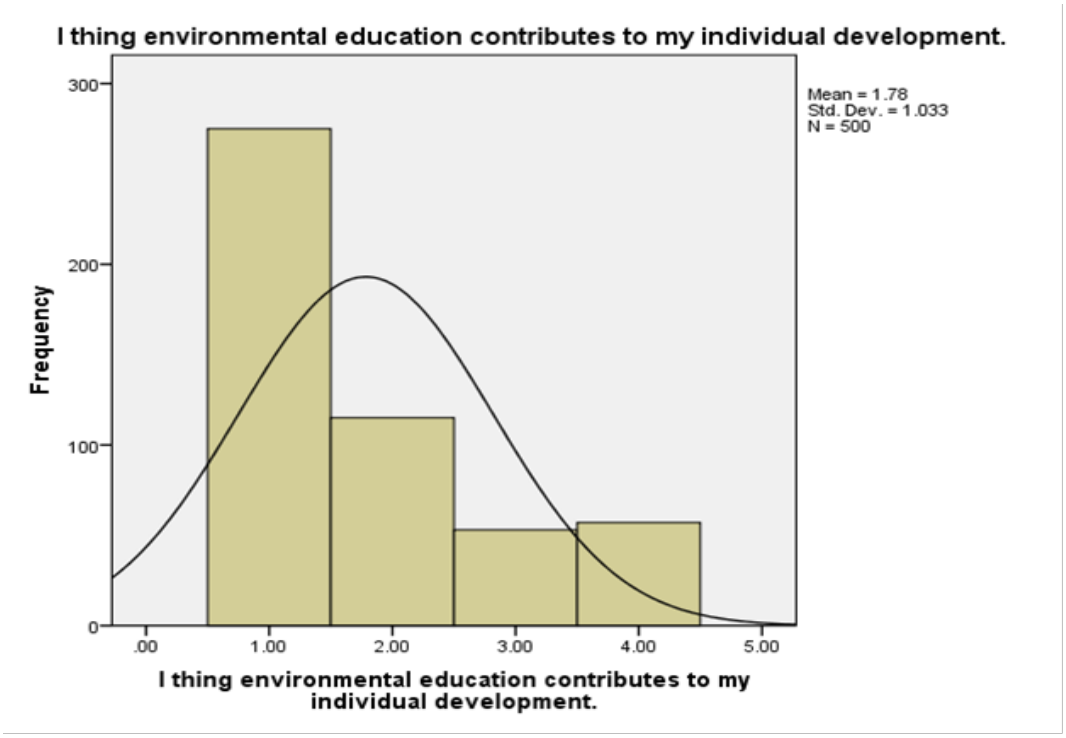

Figure 4.2.4I thing Environmental Education Contributes to my Individual Development.

Table 4.2.5 I understand Various Issues and Problems Regarding the Environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	243	48.6	48.6	48.6
	Agree	148	29.6	29.6	78.2
	Disagree	55	11.0	11.0	89.2
	Strongly Disagree	54	10.8	10.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of"understanding various issues and problems regarding the environment," 243(48.6%) strongly agreed, 148(29.6%) agreed, 55(11.0%) s disagreed and 54(10.8%) strongly disagreed with this question.

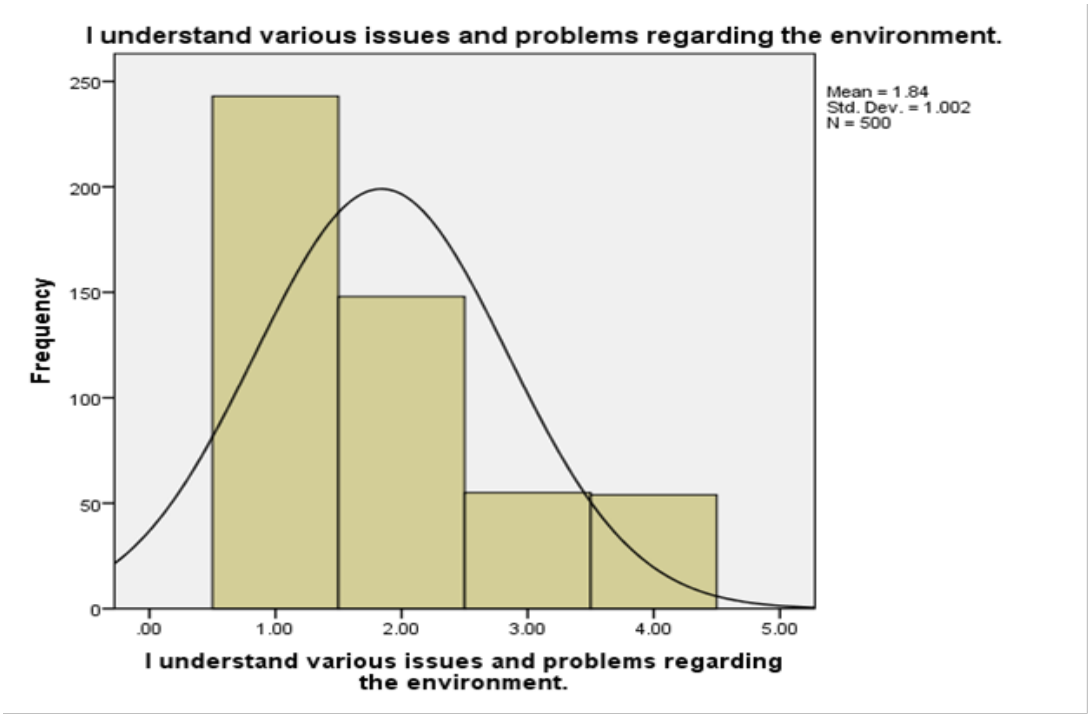

Figure 4.2.5I Understand Various Issues and Problems Regarding the Environment.

Table 4.2.6 People Are a Part of the Ecosystem.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	241	48.2	48.2	48.2
	Agree	146	29.2	29.2	77.4
	Disagree	57	11.4	11.4	88.8
	Strongly Disagree	56	11.2	11.2	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of “People’s being a part of the ecosystem,” 241(48.2%) strongly agreed, 146(29.2%) agreed, 57(11.4%) disagreed and 56(11.2%) strongly disagreed with this question.

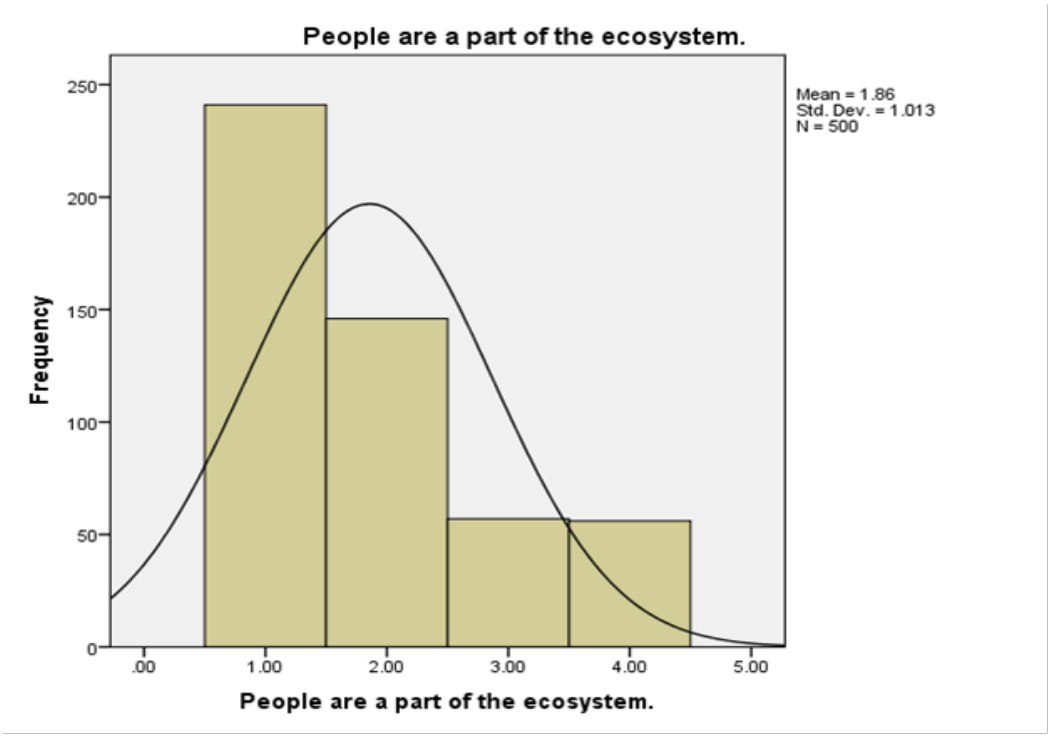

Figure 4.2.6 People Are a Part of the Ecosystem.

Table 4.2.7 Ecological Footprint is the Measurement of the Amount of the load, Determining the Effects of Humans on the Environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	255	51.0	51.0	51.0
	Agree	133	26.6	26.6	77.6
	Disagree	57	11.4	11.4	89.0
	Strongly Disagree	55	11.0	11.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of “Ecological footprintsbeing the measurement of the amount of the load, determining the effects of humans on the environment”, 255(51.0%) strongly agreed, 133(26.6%) agreed, 57(11.4%) disagreed and 55(11.2%) strongly disagreed with this question.

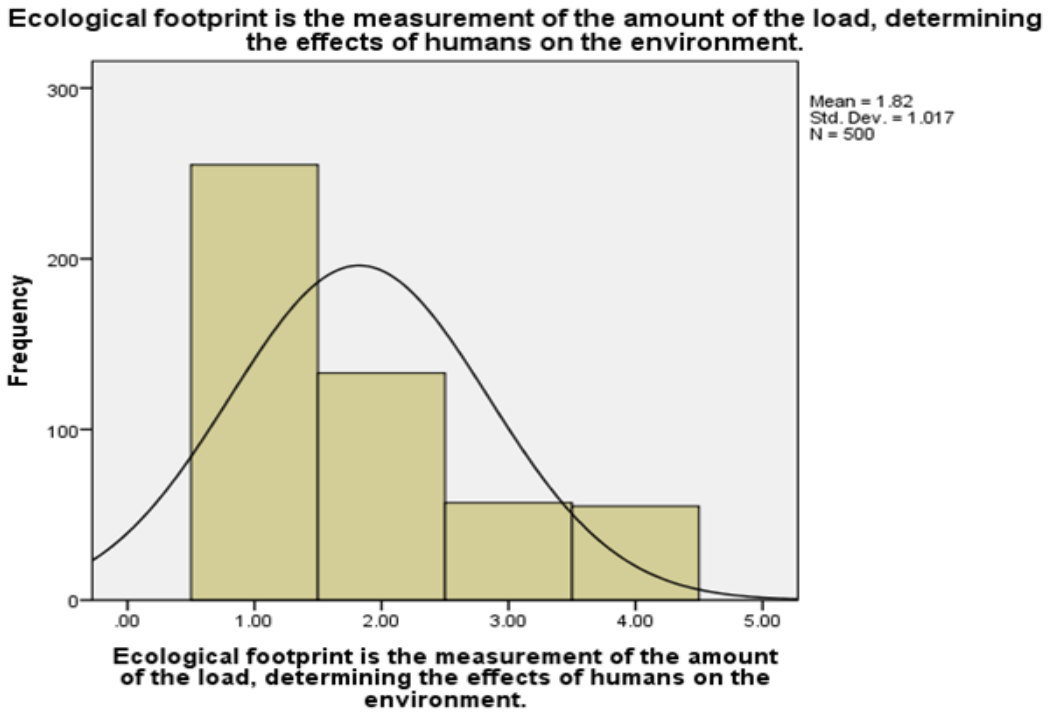

Figure 4.2.7 Ecological Footprint is the Measurement of the Amount of the load, Determining the Effects of Humans on the Environment

Table 4.2.8 Ecological Footprint is a tool used to Estimate the Effects of Humans on the Environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	264	52.8	52.8	52.8
	Agree	130	26.0	26.0	78.8
	Disagree	52	10.4	10.4	89.2
	Strongly Disagree	54	10.8	10.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of"Ecological footprint being a tool used to estimate the effects of humans on the environment", 264(52.8%) strongly agreed, 130(26.0%) agreed, 52(10.4%) disagreed and 54(10.8%) strongly disagreed with this question.

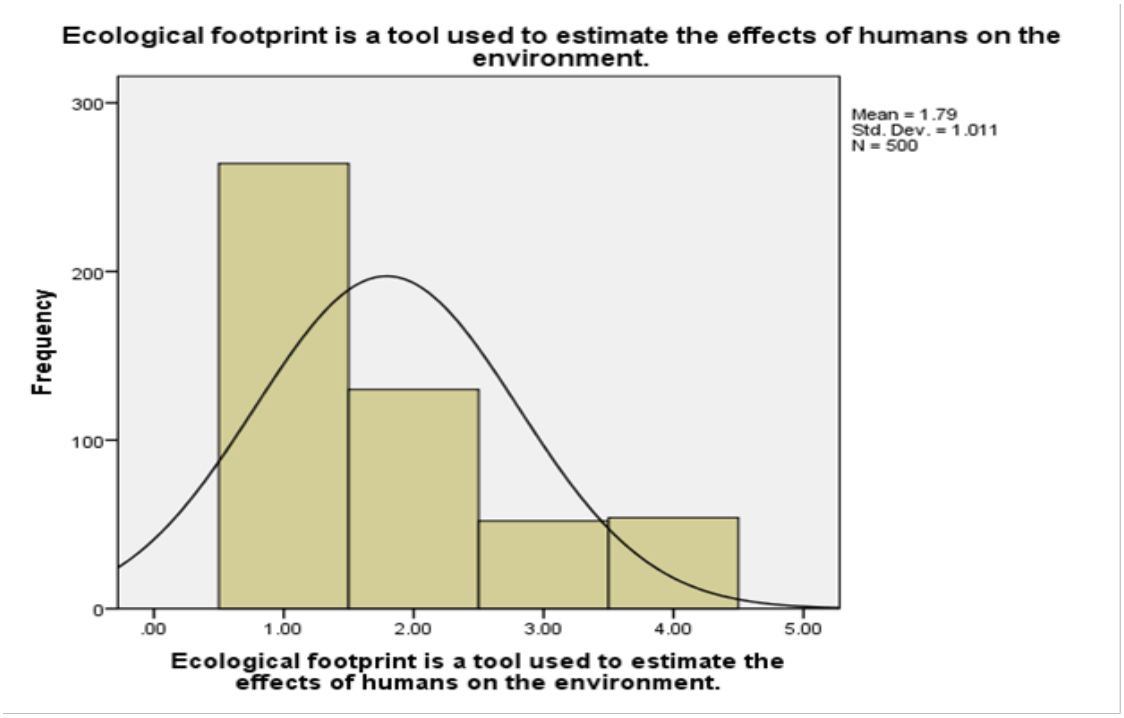

Figure 4.2.8 Ecological Footprint is a tool used to Estimate the Effects of Humans on the Environment.

Table 4.2.9 Ecological Footprint is a tool used to Obtain Information About the Ecological Limitations.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	274	54.8	54.8	54.8
	Agree	125	25.0	25.0	79.8
	Disagree	48	9.6	9.6	89.4
	Strongly Disagree	53	10.6	10.6	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of "Ecological footprint being a tool used to obtain information about the ecological limitations", 274(54.8%) strongly agreed, 125(25.0%) agreed, 48(9.6%) disagreed and 53(10.6%) strongly disagreed with this question.

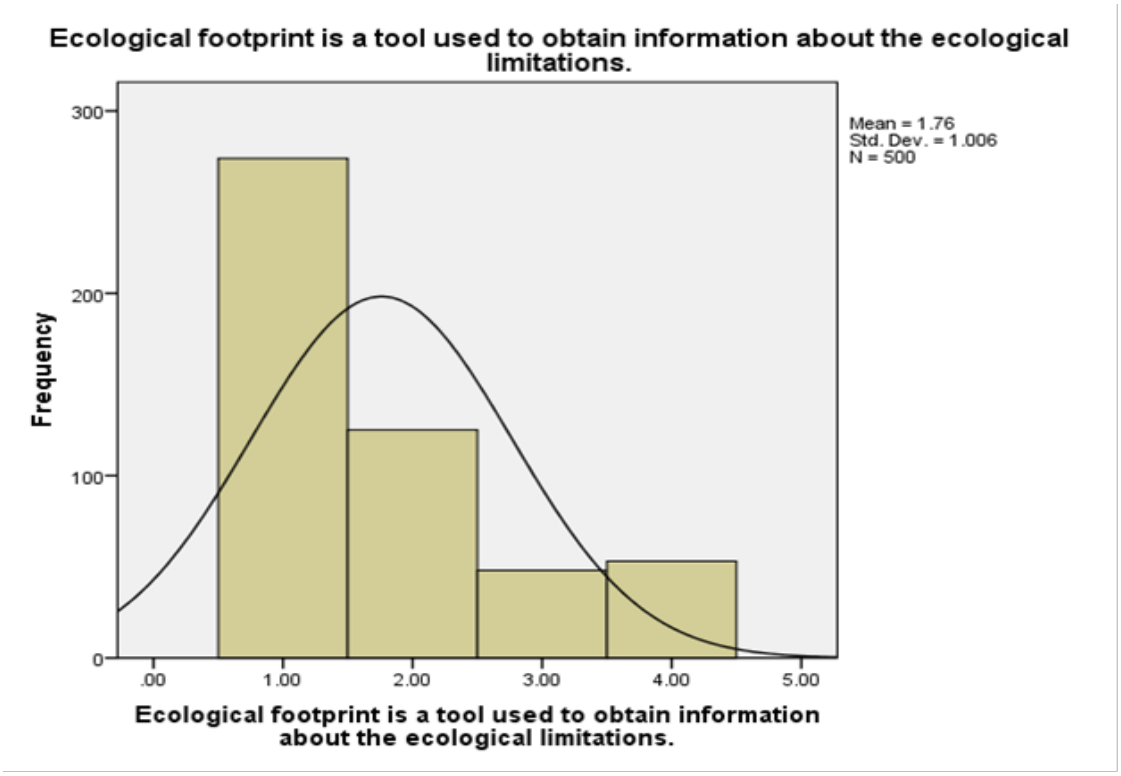

Figure 4.2.9Ecological footprint is a tool used to obtain information about the ecological limitations.

Table 4.3.0 Ecological Footprint is a tool used to Learn how to Develop Sustainable Life-Styles.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	272	54.4	54.4	54.4
	Agree	110	22.0	22.0	76.4
	Disagree	56	11.2	11.2	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of"Ecological footprint being a tool used to learn how to develop sustainable life-styles", 272(54.4%) strongly agreed, 110(22.0%) agreed, 56(11.2%) disagreed and 62(12.4%) strongly disagreed with this question.

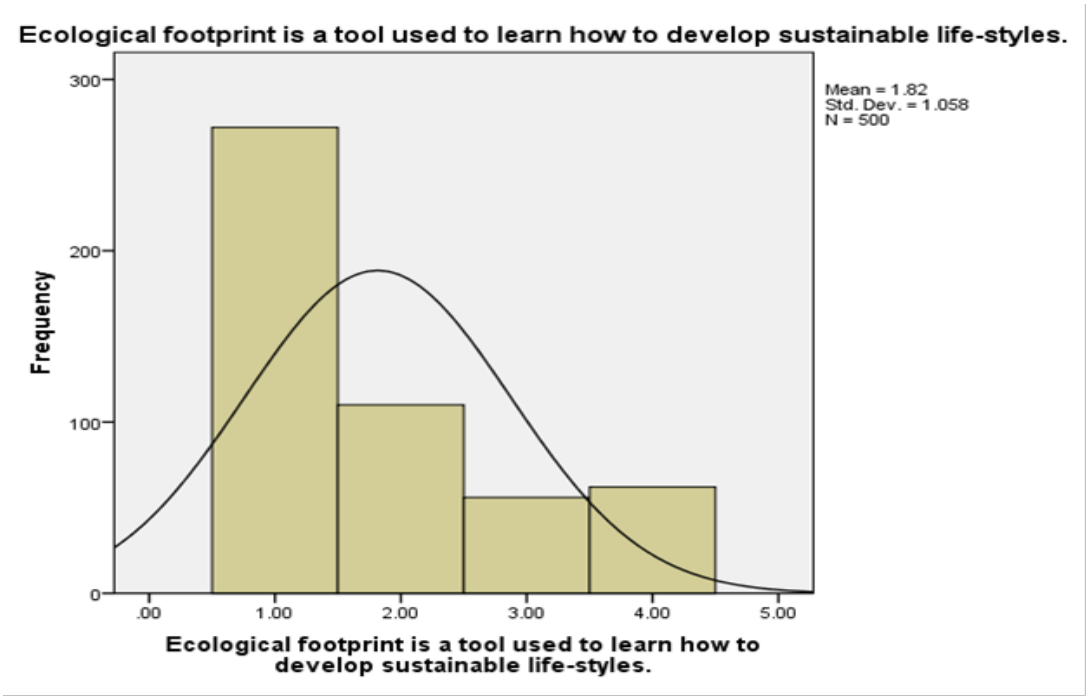

Figure 4.3.0 Ecological Footprint is a tool used to Learn how to Develop Sustainable Life-styles.

Table 4.3.1 Living Organisms in an Ecosystem are in Interaction With each other and non-Living Environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	288	57.6	57.6	57.6
	Agree	103	20.6	20.6	78.2
	Disagree	54	10.8	10.8	89.0
	Strongly Disagree	55	11.0	11.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents' opinion of"Living organisms in an ecosystem being in interaction with each other and non-living environment", 288(57.6%) strongly agreed, 103(20.6%) agreed, 54(10.8%) disagreed and 55(11.0%) strongly disagreed with this question.

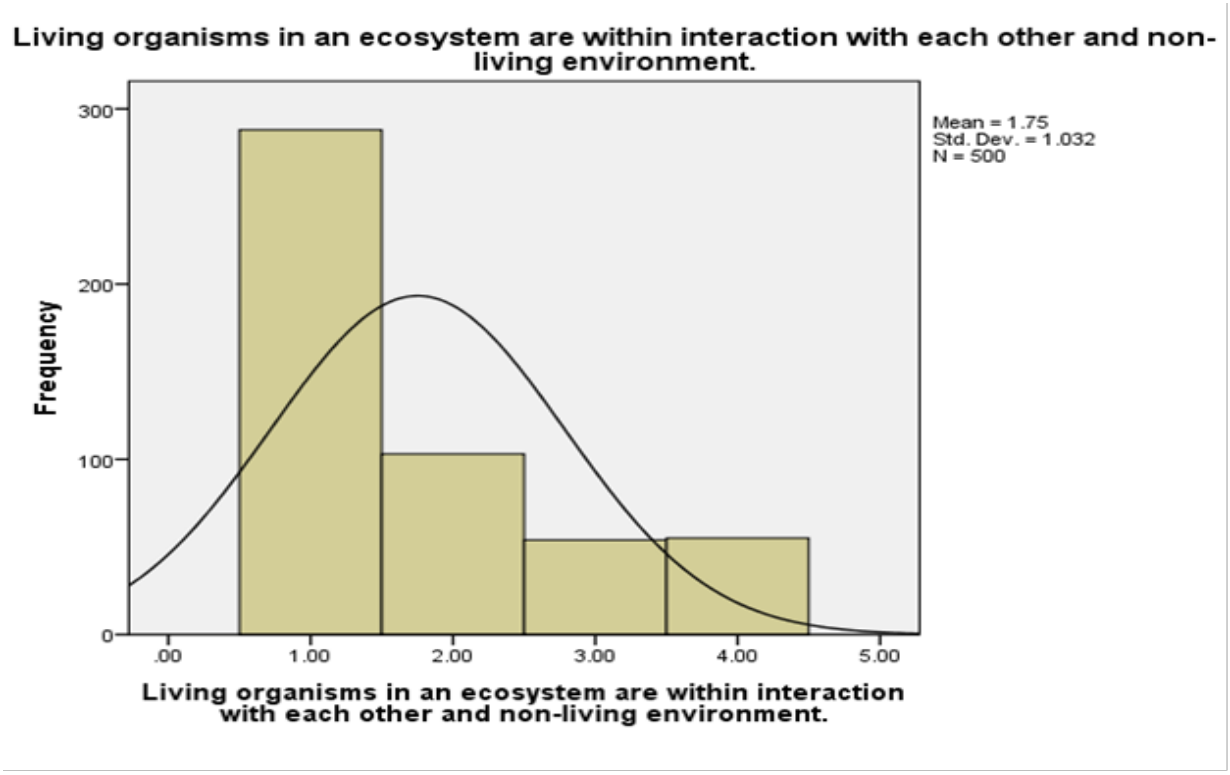

Figure 4.3.1 Living Organisms in an Ecosystem are in Interaction With Each Other and non-Living Environment.

Table 4.3.2 Natural Resources Constitute raw Materials for the Human-made Materials Offered for the use of Humans.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	246	49.2	49.2	49.2
	Agree	147	29.4	29.4	78.6
	Disagree	53	10.6	10.6	89.2
	Strongly Disagree	54	10.8	10.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if Natural resources being constituent of raw materials for the human-made materials offered to the use of humans, it shows that 246(49.2%) strongly agreed, 147(29.4%) agreed, 53(10.6%) disagreed and 54(10.8%) strongly disagreed to this question.

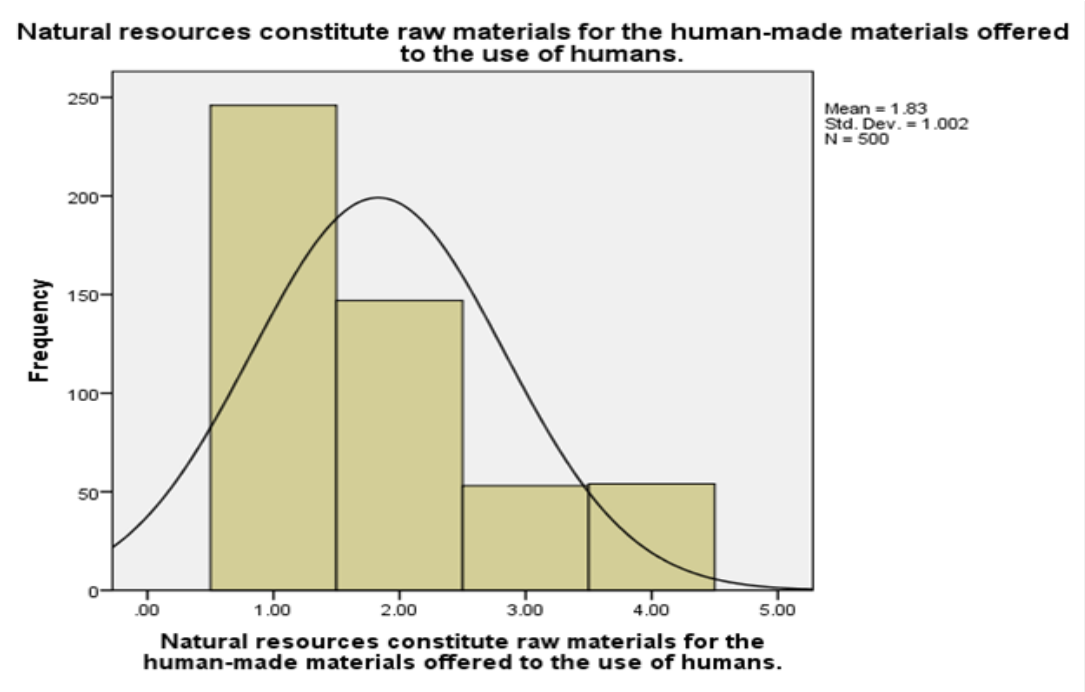

Figure 4.3.2 Natural Resources Constitute raw Materials for the Human-made Materials Offered to the use of Humans.

Table 4.3.3 Biodiversity Allows us to have a General idea About how Healthy the World is.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	279	55.8	55.8	55.8
	Agree	119	23.8	23.8	79.6
	Disagree	54	10.8	10.8	90.4
	Strongly Disagree	48	9.6	9.6	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if Biodiversity allows us to have a general idea about how healthy the world is, it shows that 279(55.8%) strongly agreed, 119(23.8%) agreed, 54(10.8%) disagreed and 48(9.6%) strongly disagreed to this question.

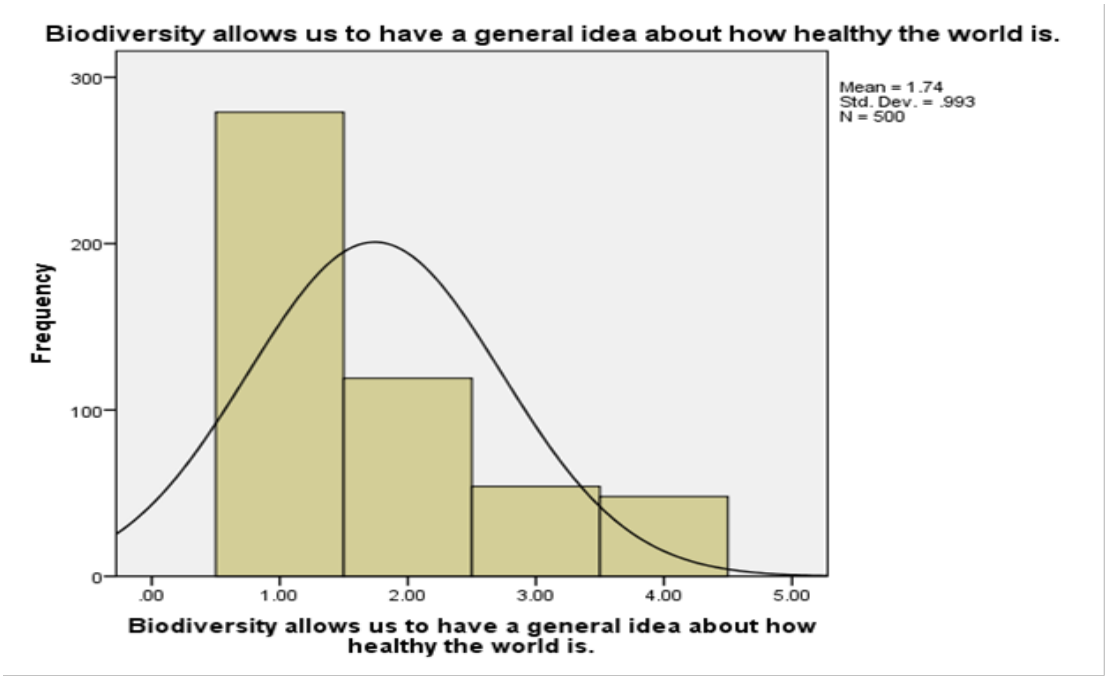

Figure 4.3.3 Biodiversity Allows us to have a General idea About how Healthy the World is.

Table 4.3.4 Technology is About the use of Knowledge and Science to Invent Tools for the use of a Small Minority on the World.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	270	54.0	54.0	54.0
	Agree	130	26.0	26.0	80.0
	Disagree	53	10.6	10.6	90.6
	Strongly Disagree	47	9.4	9.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if Technology is about the use of knowledge and science to invent tools for the use of a small minority on the world, it shows that 270(54.0%) strongly agreed, 130(26.0%) agreed, 53(10.6%) disagreed and 47(9.4%) strongly disagreed to this question.

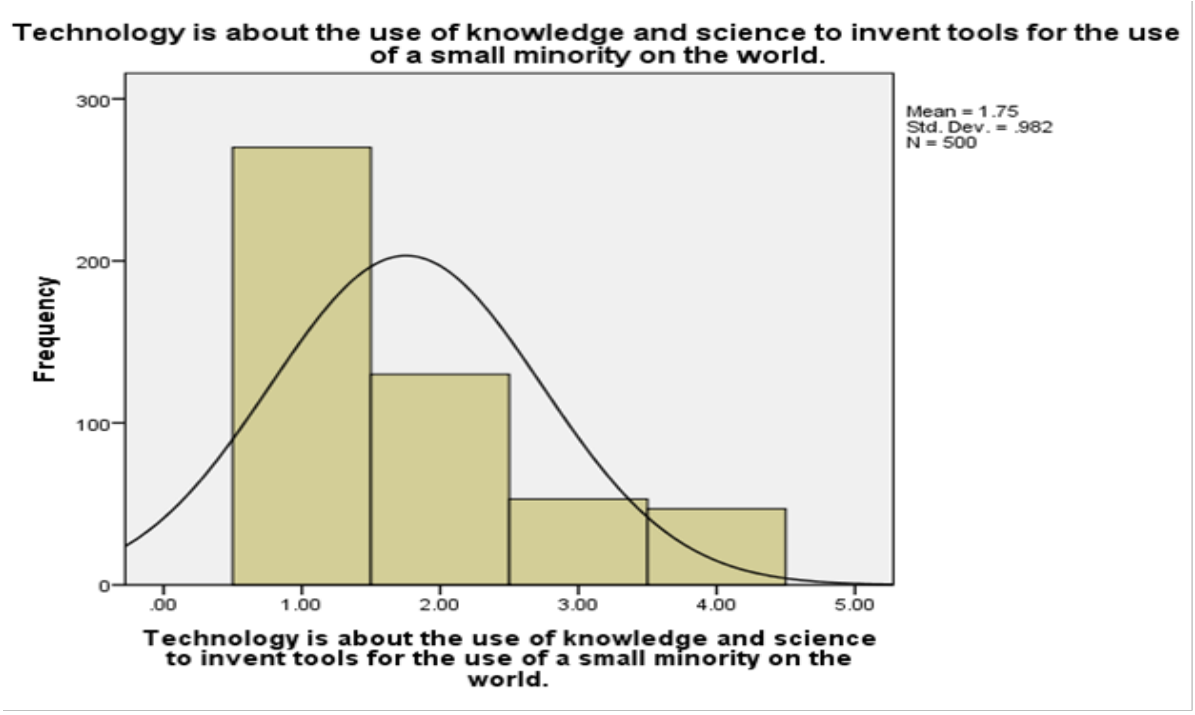

Figure 4.3.4 Technology is About the use of Knowledge and Science to Invent Tools for the use of a Small Minority on the World.

Table 4.3.5 the World Population is Increasing but the Quantity of the land Needed to Produce Food crops Remains the Same.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	97	19.4	19.4	19.4
	Agree	45	9.0	9.0	28.4
	Disagree	269	53.8	53.8	82.2
	Strongly Disagree	89	17.8	17.8	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on ifthe world population is increasing but the quantity of the land needed to produce food crops remains the same, it shows that 97(19.4%) strongly agreed, 45(9.0%) agreed, 269(53.8%) disagreed and 89(17.8%) strongly disagreed to this question.

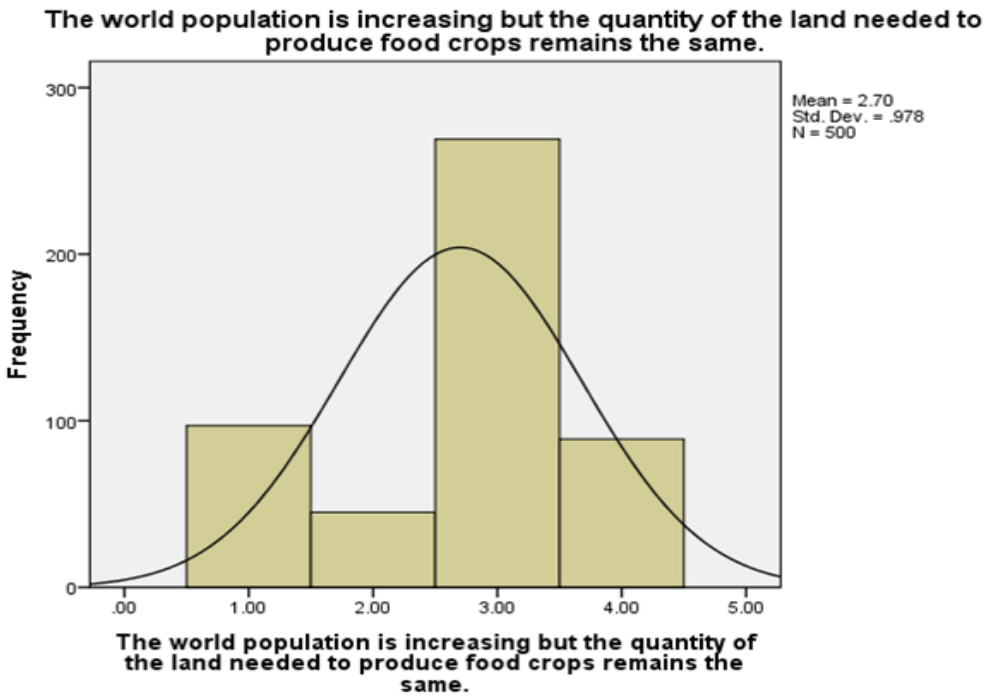

Figure 4.3.5 the World Population is Increasing but the Quantity of the Land Needed to Produce Food Crops Remains the Same.

Table 4.3.6 Climate is Controlled by the Energy Levels of Earth and Atmosphere.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	252	50.4	50.4	50.4
	Agree	124	24.8	24.8	75.2
	Disagree	62	12.4	12.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if Climate is controlled by the energy levels of Earth and atmosphere, it shows that 252(50.4%) strongly agreed, 124(24.8%) agreed, 62(12.4%) disagreed and 62(12.4%) strongly disagreed with this question.

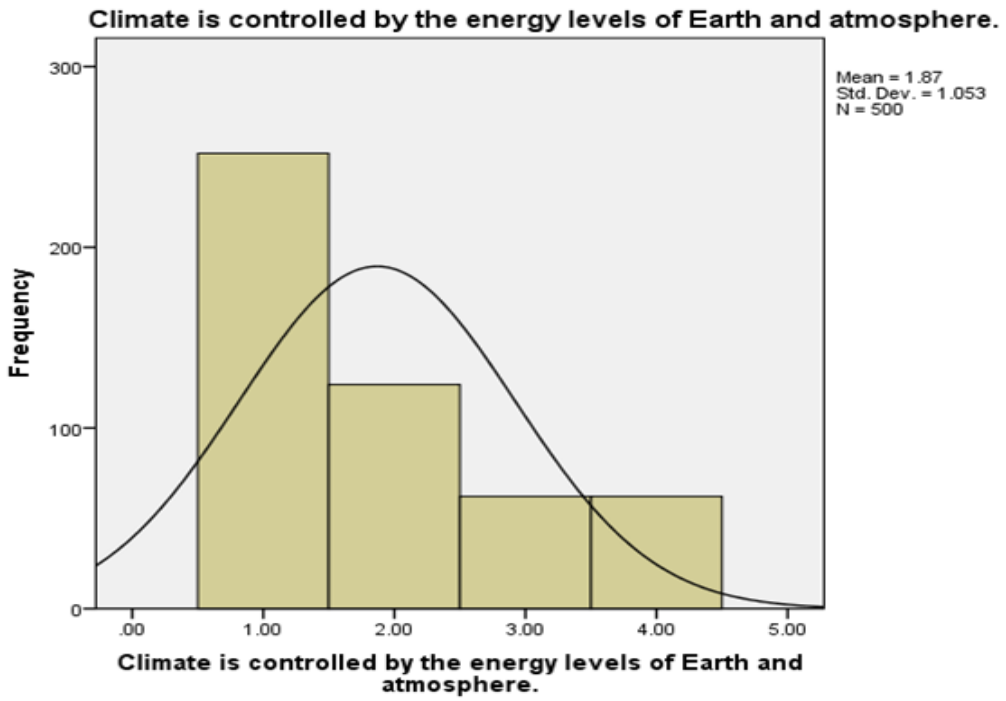

Figure 4.3.6 Climate is Controlled by the Energy Levels of Earth and Atmosphere

Table 4.3.7 If the heat of Earth Increases, food and Water Scarcity Takes Place.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	114	22.8	22.8	22.8
	Agree	41	8.2	8.2	31.0
	Disagree	260	52.0	52.0	83.0
	Strongly Disagree	85	17.0	17.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of heat of Earth increases, food and water scarcity takes place, it shows that 114(22.8%) strongly agreed, 41(8.2%) agreed, 260(52.0%) disagreed and 85(17.0%) strongly disagreed to this question.

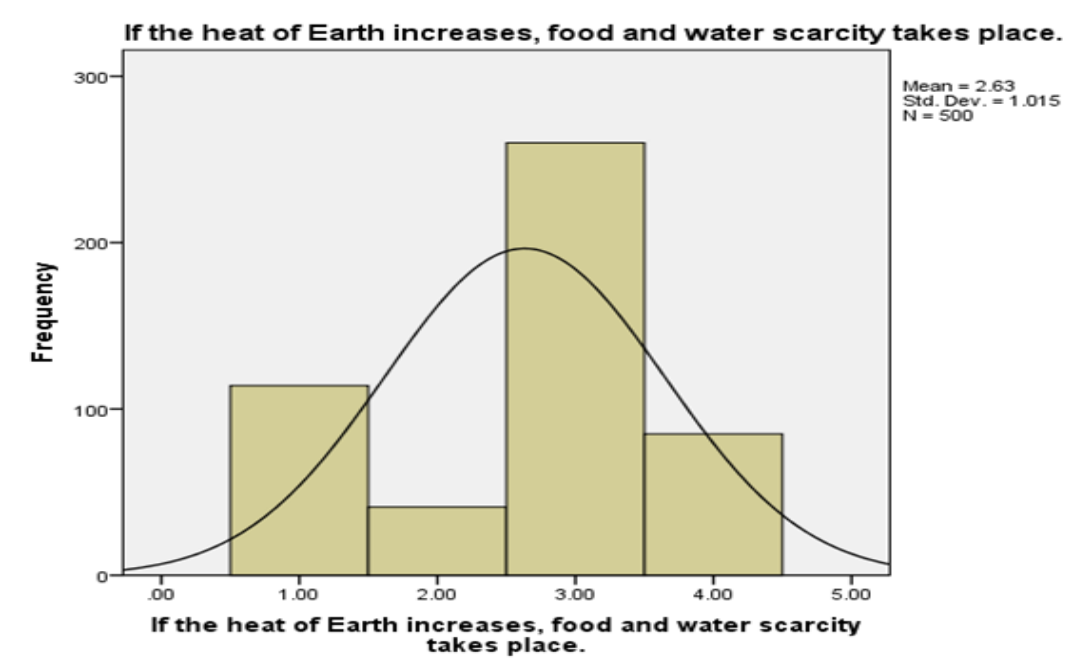

Figure 4.3.7 If the heat of Earth Increases, Food and Water Scarcity Takes Place.

Table 4.3.8 Water on the World is Equally Dispersed.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	114	22.8	22.8	22.8
	Agree	35	7.0	7.0	29.8
	Disagree	261	52.2	52.2	82.0
	Strongly Disagree	90	18.0	18.0	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion on if Water on the world is equally dispersed, it shows that 114(22.8%) strongly agreed, 35(7.0%) agreed, 261(52.2%) disagreed and 90(18.0%) strongly disagreed with this question.

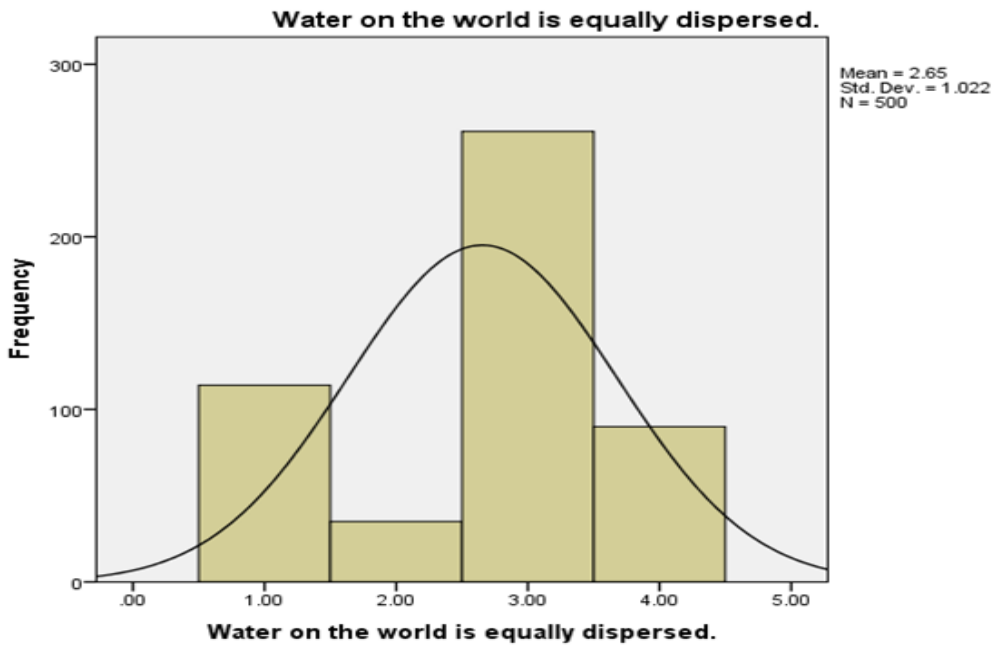

Figure 4.3.8 Water on the World is Equally Dispersed.

Table 4.3.9 Water Around the Whole World is at a Low Amount.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	259	51.8	51.8	51.8
	Agree	131	26.2	26.2	78.0
	Disagree	48	9.6	9.6	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of Water around the whole world is at a low amount, it shows that 259(51.8%) strongly agreed, 131(26.2%) agreed, 48(9.6%) disagreed and 62(12.4%) strongly disagreed with this question.

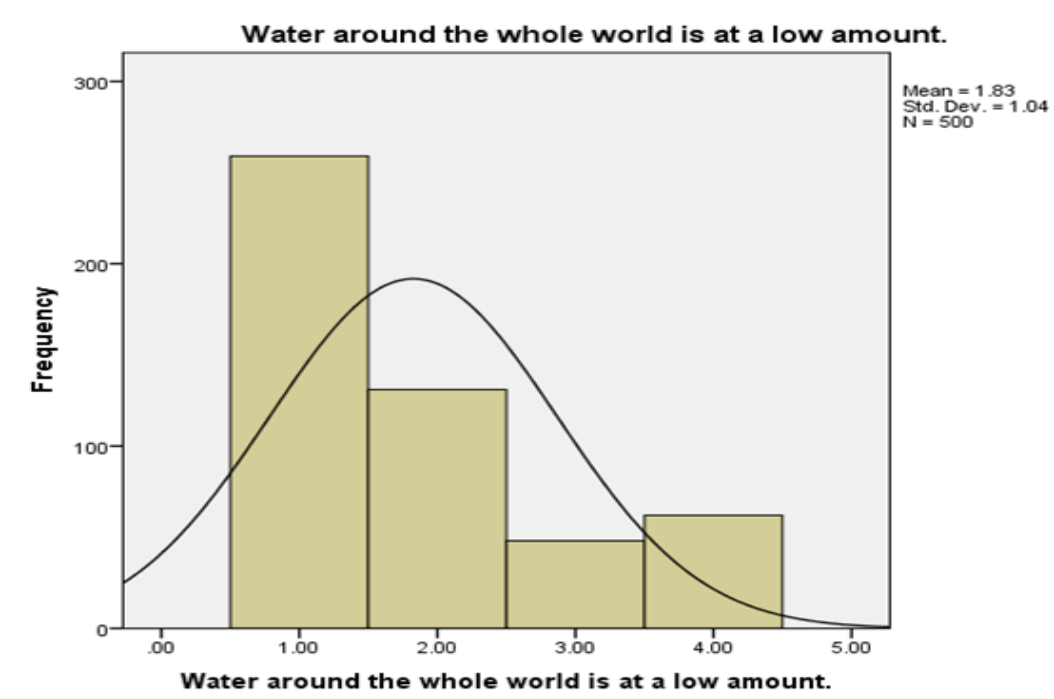

Figure 4.3.9 Water Around the Whole World is at a low Amount.

Table 4.4.0 The use of Renewable Energy Decreases the Effects of Global Warming.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	265	53.0	53.0	53.0
	Agree	124	24.8	24.8	77.8
	Disagree	49	9.8	9.8	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of the use of renewable energy decreases the effects of global warming, it shows that 265(53.0%) strongly agreed, 124(24.8%) agreed, 49(9.8%) disagreed and 62(12.4%) strongly disagreed to this question.

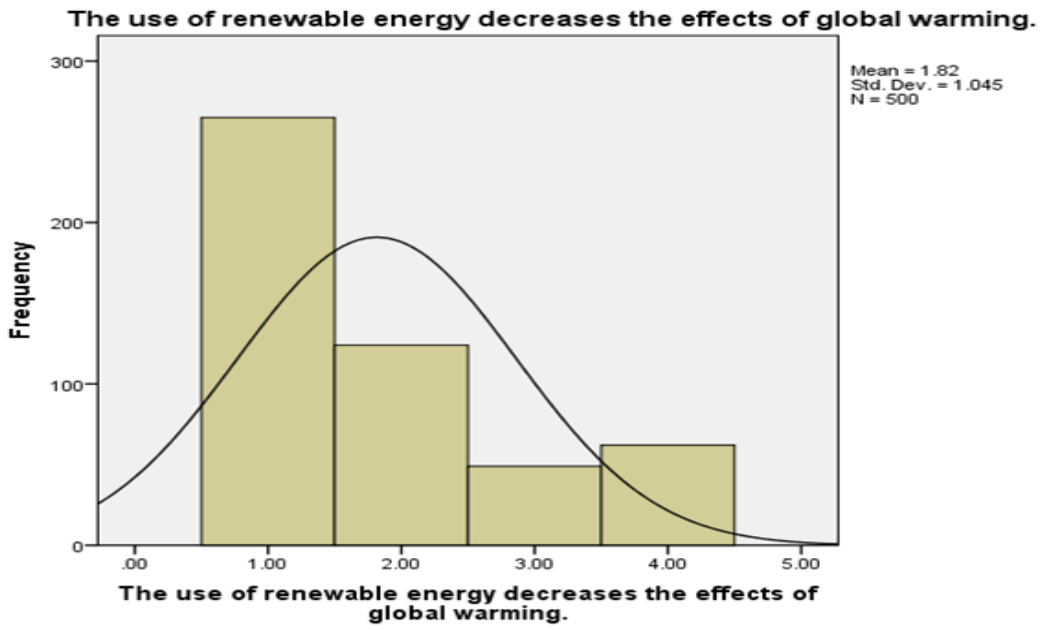

Figure 4.4.0 The use of Renewable Energy Decreases the Effects of Global Warming.

Table 4.4.1 Health Refers to a Physically, Mentally and Socially Good Condition and Preventing the Diseases.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	275	55.0	55.0	55.0
	Agree	111	22.2	22.2	77.2
	Disagree	52	10.4	10.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of Health refers to a physically, mentally and socially good condition and preventing the diseases, it shows that 275(55.0%) strongly agreed, 111(22.2%) agreed, 52(10.4%) disagreed and 62(12.4%) strongly disagreed to this question.

Figure 4.4.1 Health Refers to a Physically, Mentally and Socially Good Condition and Preventing the Diseases.

Table 4.4.2 Food Safety Means the Need for Humans to Keep their food at Safe Places.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	252	50.4	50.4	50.4
	Agree	124	24.8	24.8	75.2
	Disagree	62	12.4	12.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of Food safety means the need for humans to keep their food at safe places, it shows that 252(50.4%) strongly agreed, 124(24.8%) agreed, 62(12.4%) disagreed and 62(12.4%) strongly disagreed with this question.

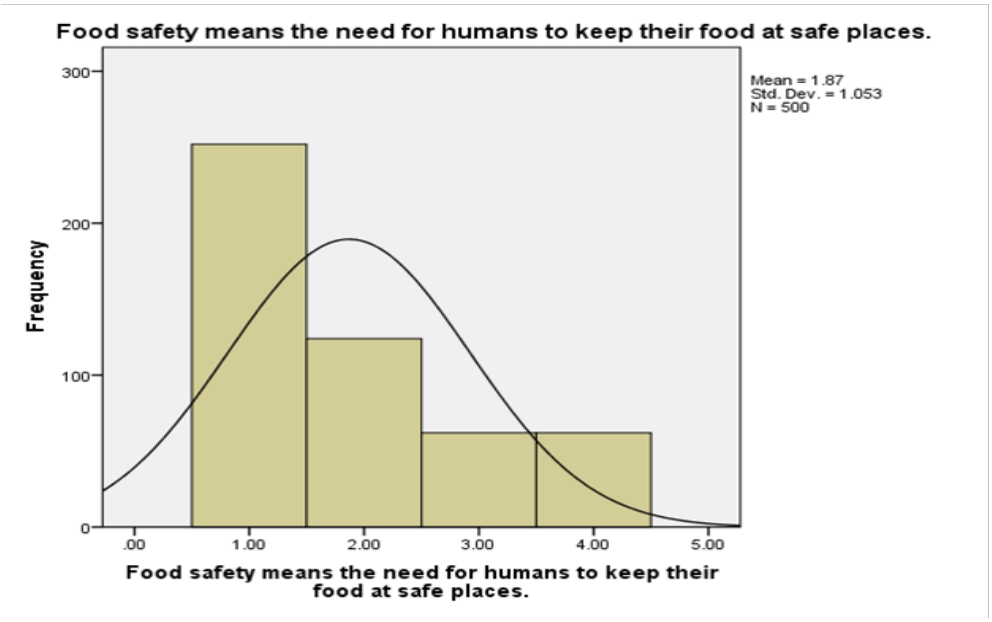

Figure 4.4.2 Food Safety Means the need for Humans to Keep their Food at Safe Places.

Table 4.4.3 Learning the Principles of Sustainable Living Contributes to Solving the Environmental Issues.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	245	49.0	49.0	49.0
	Agree	131	26.2	26.2	75.2
	Disagree	62	12.4	12.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of Learning the principles of sustainable living contributes to solving the environmental issues, it shows that 245(49.0%) strongly agreed, 131(26.2%) agreed, 62(12.4%) disagreed and 62(12.4%) strongly disagreed with this question.

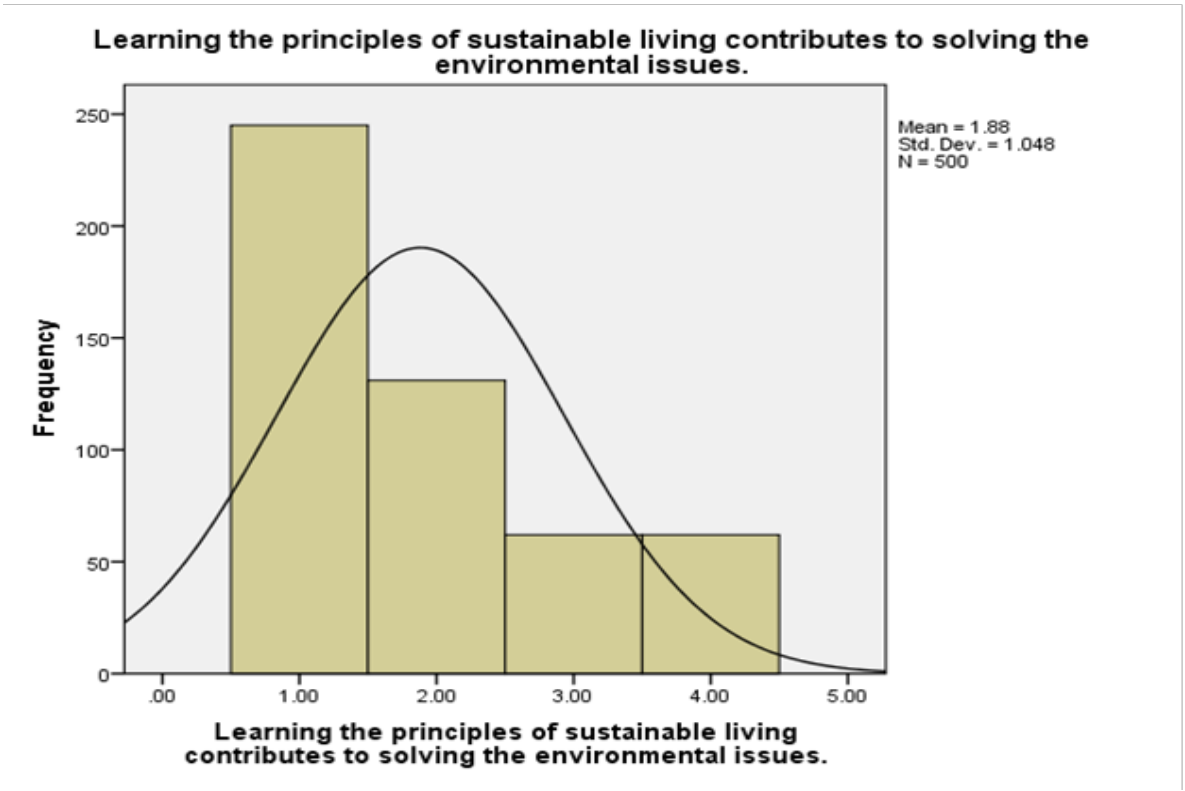

Figure 4.4.3 Learning the Principles of Sustainable Living Contributes to Solving the Environmental Issues.

Table 4.4.4 I do not Waste the Energy Resources While Using.

		Frequency	Percent	Valid Percent	Cumulative Percent
Vald	Strongly Agree	232	46.4	46.4	46.4
	Agree	124	24.8	24.8	71.2
	Disagree	73	14.6	14.6	85.8
	Strongly Disagree	71	14.2	14.2	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of **I do not waste the energy resources while using,** it shows that 232(46.4%) strongly agreed, 124(24.8%) agreed, 73(14.6%) disagreed and 71(14.2%) strongly disagreed with this question.

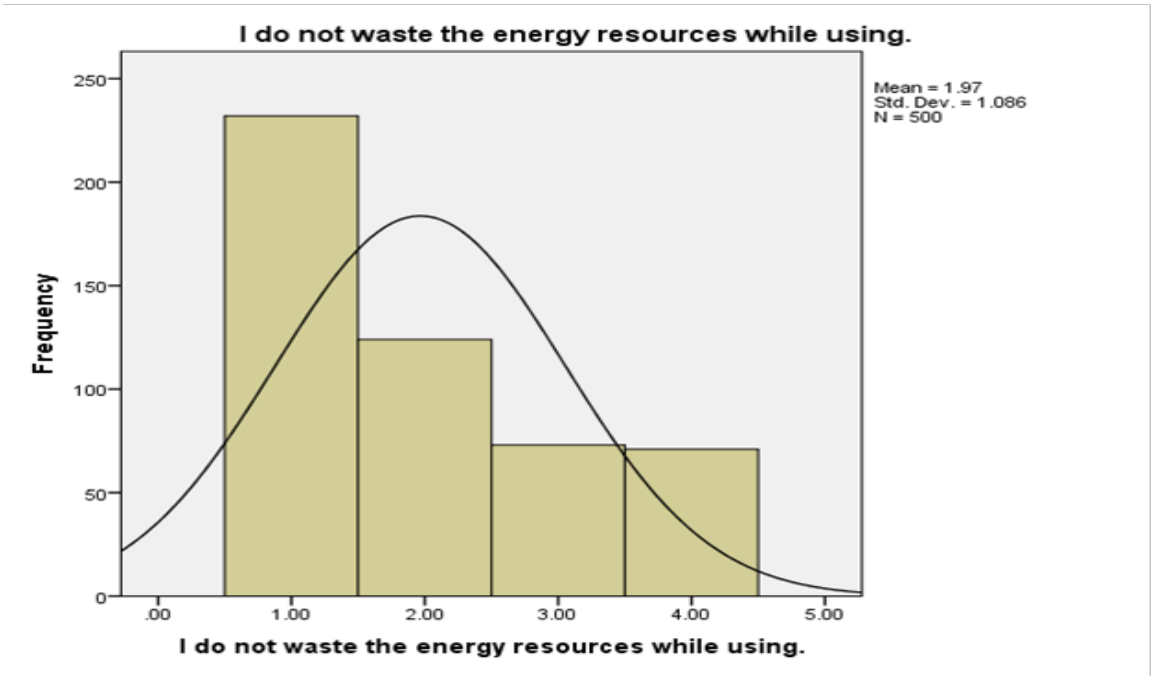

Figure 4.4.4 I do not Waste the Energy Resources While Using.

Table 4.4.5 I raise Awareness Among People Around me About the Environment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	234	46.8	46.8	46.8
	Agree	132	26.4	26.4	73.2
	Disagree	72	14.4	14.4	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of I raise awareness among people around me about the environment, it shows that 234(46.8%) strongly agreed, 132(26.4%) agreed, 72(14.4%) disagreed and 62(12.4%) strongly disagreed to this question.

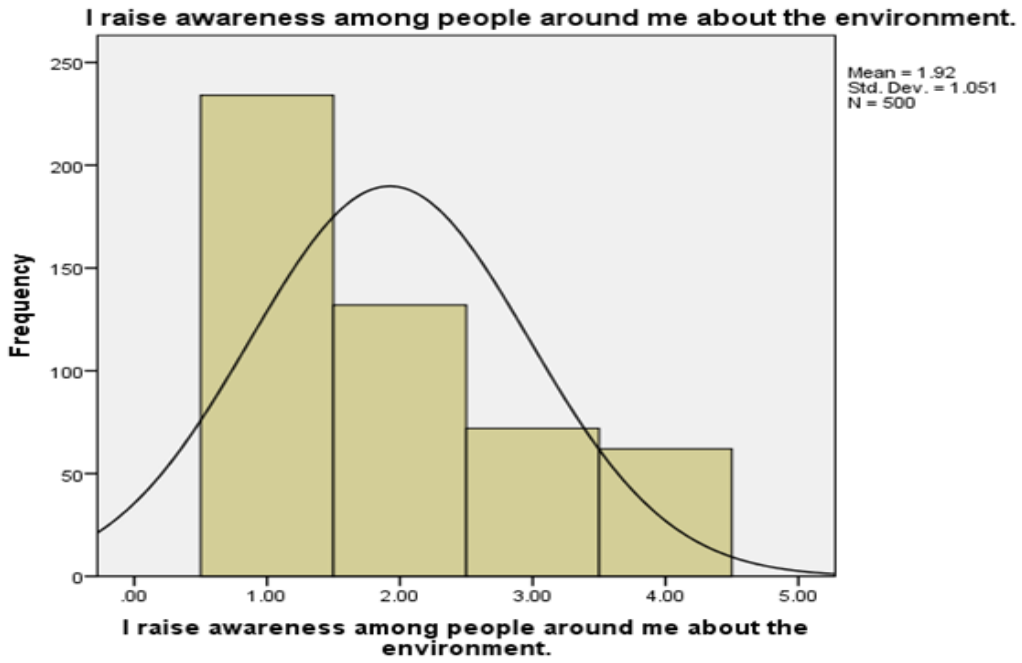

Figure 4.4.5 I Raise Awareness Among People Around me About the Environment.

Table 4.4.6 I live in a Sustainable way.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	224	44.8	44.8	44.8
	Agree	143	28.6	28.6	73.4
	Disagree	71	14.2	14.2	87.6
	Strongly Disagree	62	12.4	12.4	100.0
	Total	500	100.0	100.0	

The table above classifies respondents opinion of I live in a sustainable way, it shows that 224(44.8%) strongly agreed, 143(28.6%) agreed, 71(14.2%) disagreed and 62(12.4%) strongly disagreed to this question.

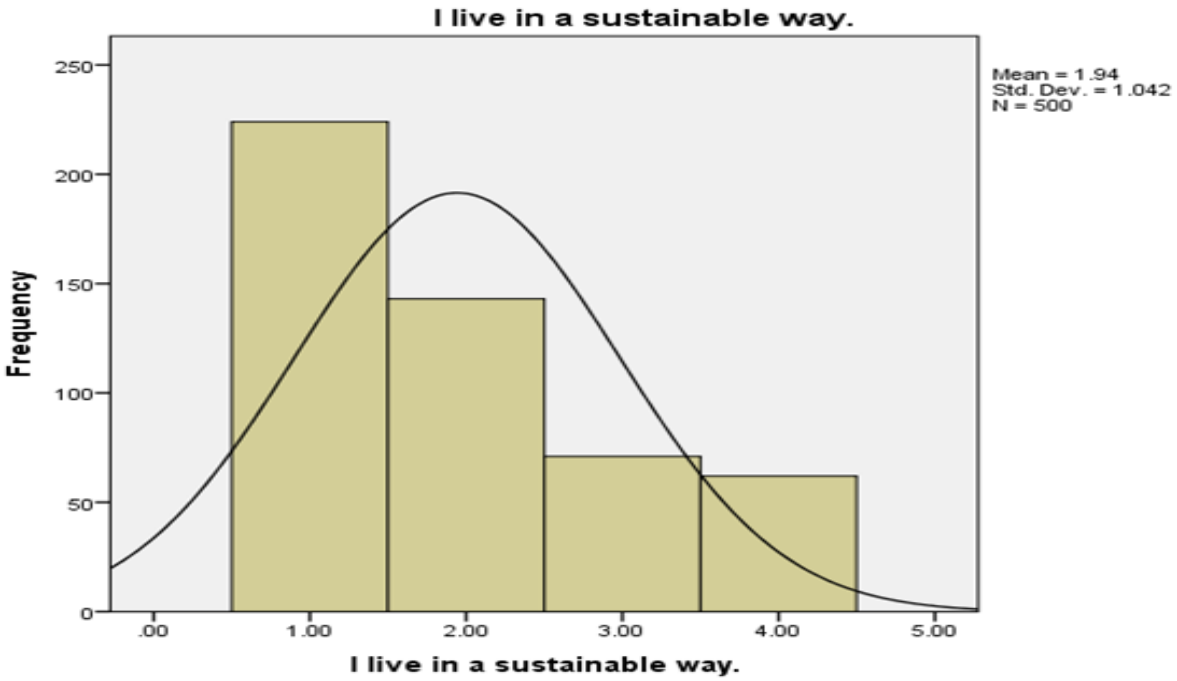

Figure 4.4.6 I Live in a Sustainable Way.

CHAPTER V

5. DISCUSSIONS AND CONCLUSION

Generally the educational environment is supposed to be a creative and conducive environment for research, but in this case a lot of students have the believe that creativity is not promoted in the society. Most of them do not like to understand the truth, as a matter of fact they would rather not let out information. So many surveys that have been carried out shows that a lot of students as well as normal dwellers of the environment do not think there is a very big need for environmental sustainability practice or culture, as a matter of fact some of them do not even care about the issue These surveys also clearly shows that though there is need to improve on our education system, it cannot be totally condemned. The challenge then becomes how we can keep up with the upcoming and new innovations in the society today in regards to the environmental issues affecting our government. In this case there are major parties that must come into play and these parties include the government, the environmentalist and the educationist.

It can be said that the training prerequisites of wellbeing and environmental institutions ought to be efficiently distinguished simultaneously with labor prerequisites. Every organization ought to be asked for to set up a training arrangement covering professionals staffs and technical staff development so as they can blend in the environmental protection, vitality, wellbeing and educational arrangements. Candidates for training ought to be painstakingly chosen by the associated institutions. Training ought to be particular and at work, which could resolve any issues generally brought about by discharging reasonable staff for any time allotment. Abroad training ought to be restricted to more elevated amount of staff who require particular skills for which training is not accessible locally. The wellbeing and environmental protection institutions ought to likewise get ready for satisfactory training arrangements, including refreshing the learning of technical and professional staff. Libya needs to begin portable aptitude development research centers crosswise over urban areas. The mobiles will be outfitted with contraptions and

equipment expected to direct ability development training. Being an oil delivering nation there is critical requirement for training in taking after eight measured wellbeing administration components, they include

1. The Health related risk assessment and planning
2. The control of workplace exposures and Industrial hygiene
3. Emergency management in the Medical field
4. Keeping Fit for task assessment and health surveillance
5. Health risk and environmental impact assessment

The results of the survey carried out in the course of this study have shown that the subject of sustainability and environmental protection is not a new topic to the indigenes of the country, most especially the respondents of the survey who are teachers of the secondary schools. This means that it is also not a maiden topic to the schools in Libya as well. The survey has proven well in answering the research questions as asked in the research

1. How has environmental education been included in the curriculum of the school division?
2. How has the implementation of environmental education directed by individual classroom teachers?
3. What are the common practices and strategies that are mostly used to implement environmental education?
4. To what extent are these practices used to implement environmental education formally evaluated?
5. How do schools in Libya utilize teaching tools for environmental education?

For research question one, 405 of our respondents agreed to have received lectures of environmental protection and apparently about 244 respondents are members of associations related to environmental issues, also 249 respondents agree to have participated in projects related to environmental education in the communities, and lastly 234 respondents agree to constantly raise awareness among people around them about the environment. This apparently means that there is no formal environmental education topics in the curriculum of the schools, however the awareness of environmental responsibilities is inculcated

informally by these teachers who already have such awareness.

For our research question two, as mentioned earlier because there is no formal introduction of environmental and sustainability education in the curriculum of secondary schools, the classroom teachers tend to provide this education at convenient periods and time, and this is done informally as well. Although this may not be good enough environmental educational knowledge is to be provided regularly.

For research question three and four we can say that the use of television advertisement, informal as well as formal environmental clubs and groups, also people who already have this knowledge try to raise awareness amongst others, and lastly there are monthly published articles in relations to environmental issues.

Lastly for our research question five we can say that the major tools used is the ecological footprint that is observed by the students in their day to day activities, and the environmental effects on the ecological footprint, as well as the threat that it possess in the futuristic societal plans of the country and its economy. This is duel explained to the students by their teachers.

Generally in comparison to other countries of the world, most especially developed countries, it will not be wrong to say that Africa has not taken the issue of sustainability and environmental education more keenly and Libya is not an exception to these countries. Therefore it is important that countries in Africa begin to see sustainability and environmental awareness as an issue that must be addressed.

Conclusion

We can out rightly say that this research has proven to be important in understanding the environmental education and sustainability enlightenment status of secondary schools in Libya.

The discoveries in this research brought up many issues about what understudies accept themselves to learn with respect to Environmental Education. Just like the case with most research, a greater number of questions were raised than answers found, and the questions raised merit facilitate investigation. This study found a noteworthy cluster of learning and mindfulness with respect to taking an interest understudies in regards to environmentalism, and how this learning and mindfulness grows by and by. We can also say from this study that from the perspective of the student, there may not be a great deal of direction in the curriculum with respect to environmental education, perhaps in previous times there was but it was lacking. However a very broad range of attitudes regarding the environment was uncovered. While on the other hand, there seem to be some form of enlightenment in the path of the teachers,

Basically the need for practical lessons gained from activities like curriculum development, is verifiable. Lessons learned can possibly create and utilize framework models to make better prescient in sound betray development foundations and administration.

Recommendations

The consequences of this research plainly demonstrate the perplexity with respect to numerous optional understudies. It is likewise evident that, in view of this review and others, the mixture show with respect to Environmental Education in the Libya curriculum has been unsuccessful, and on this note we can say that is remains an unsuccessful approach, therefore it may not work in the future. The researcher recommends the following

1) That further research be carried out to ascertain the status of student knowledge with respect to issues of environmental and sustainability nature.

2) That environmental education be successfully and formally inculcated in the curriculum of the secondary schools in Libya
3) That compulsory, environment and sustainability , be taught at the elementary level as well , this is because it may be too late if only implemented at the secondary level
4) And lastly.Properly organized teacher education programs aimed at preparing teachers to teach Environmental Education curriculum at the elementary and secondary levels be looked into.

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Appendix

Dear student

Thank you for your participation, this survey is related to a scientific study as a result you will not be given any grade. Therefore please do not write your name, as you read the questions carefully and answer them sincerely. The survey should take no longer than 20 minutes to complete

Omar I

O Elgares

Class…… Age……

Faculty ……

Department ……

Gender: female ☐ male ☐

Nationality: TR ☐ TRNC ☐ Others ☐

The population of the area where you live: less than 500 ☐ between 500-2000 ☐ between 2000-5000 ☐ between 5000-10000 ☐ between 10000-20000 ☐ between 20000-50000 ☐ more than 50000 ☐

Education status of parents

Father Mother

Elementary ☐ Elementary ☐

Primary ☐ Primary ☐

Secondary ☐ Secondary ☐

Bachelors ☐ Bachelors ☐

Postgraduate ☐ Postgraduate ☐

What is your family monthly income?

Less than 1000DN ☐ 1000DN-2000DN ☐ 2000DN-3000DN ☐ 3000DN-4000DN ☐ More than 4000DN ☐

Please tick the appropriate option in the following questions

1. Have you received any environmental lessons before?

Yes ☐ No ☐

2. Are you actively a member of any environmental group
   Yes ☐ No ☐

The sample questionnaire consist of two section the first section introduces the researcher to the participant and as well informs the participants of the rules of the survey, it also gives the personal information of the participant. The second part is the questionnaire itself

ANNEX-1

Environmental Education Survey

Name-Surname

Student Number:

Instruction:

Please read the explanations below before answering the questions in the survey.

This survey has been prepared in order to assess your knowledge on "Ecological footprint" and "Sustainable living" and your attitude and behaviours towards the environment and sustainable living.

Please read the below information carefully before starting to fill in the survey.

LIKE SCALE

1. Strongly disagree
2. Disagree
3. Neither agree nor disagree
4. Agree
5. Strongly agree

Please read the below statements carefully and answer the statement according to the numerical values given in the like scale. Please tick the most suitable box for you. Make sure you answer all the questions.

No	Questions	Strongly agree	Agree	Disagree	Strongly disagree
1	I think recycling has a positive impact on the environment.				
2	I believe my attitude towards the environment changes when I watch environmental programs on TV.				
3	I read articles about environmental topics.				
4	I am a member of a society/association related to environmental issues.				
5	I think it is important to take action on environmental issues.				
6	I believe there are individual responsibilities on the environmental sustainability.				
7	I am aware of the current strategies used in order to develop environmental issues.				
8	I do not consider the environment as a part of me.				
9	Environment is not important for me.				
10	I consider environmental responsibility as an action for a positive change.				
11	I participate in the projects related to the environmental education in the communities I am in.				

12	I recycle my garbage.				
13	I thing environmental education contributes to my individual development.				
14	I understand various issues and problems regarding the environment.				
15	People are a part of the ecosystem.				

No	Questions	Strongly agree	Agree	Disagree	Strongly disagree
16	Ecological footprint is the measurement of the amount of the load, determining the effects of humans on the environment.				
17	Ecological footprint is a tool used to estimate the effects of humans on the environment.				
18	Ecological footprint is a tool used to obtain information about the ecological limitations.				
19	Ecological footprint is a tool used to learn how to develop sustainable life-styles.				
20	Living organisms in an ecosystem are within interaction with each other and non-living environment.				
21	Natural resources constitute raw materials for the human-made materials offered to the use of humans.				
22	Biodiversity allows us to have a general idea about how healthy the world is.				
23	Technology is about the use of knowledge and science to invent				

	tools for the use of a small minority on the world.				
24	The world population is increasing but the quantity of the land needed to produce food crops remains the same.				
25	Climate is controlled by the energy levels of Earth and atmosphere.				

No	Questions	Strongly agree	Agree	Disagree	Strongly disagree
26	If the heat of Earth increases, food and water scarcity takes place.				
27	Water on the world is equally dispersed.				
28	Water around the whole world is at a low amount.				
29	The use of renewable energy decreases the effects of global warming.				
30	Health refers to a physically, mentally and socially good condition and preventing the diseases.				
31	Food safety means the need for humans to keep their food at safe places.				
32	Learning the principles of sustainable living contributes to solving the environmental issues.				
33	I do not waste the energy resources while using.				
34	I raise awareness among people around me about the environment.				
35	I live in a sustainable way.				